Notice of an Electronically Conducted
Regular Meeting of the Charter Township of Union
Planning Commission

Notice is hereby given that the Charter Township of Union Planning Commission will conduct a regular meeting electronically on Tuesday, May 18, 2021 at 7:00 p.m., consistent with the emergency declarations and direction from state and county health officials to slow the spread of the COVID-19 virus and the Open Meetings Act (Public Act 267 of 1976, as amended)."

There will be no in-person attendance in the Township Hall Board Room (2010 S. Lincoln Rd., Mt. Pleasant, MI 48858), although some Planning Commission members and Township staff may choose to participate from this location.

All interested persons may attend and participate. The public may participate in the meeting by computer and smart phone using the following link to the electronic meeting location: https://us02web.zoom.us/j/89751444718 (Meeting ID: "897 5144 4718" Passcode "038923"). The moderator will open public access to the electronic meeting space at 6:55 p.m.

To participate via telephone conference call, please call (312) 626-6799. Enter "897 5144 4718" and the "#" sign at the "Meeting ID" prompt. Lastly, re-enter the "#" sign again at the "Participant ID" prompt to join the meeting.

The meeting agenda, packet of materials relating to the meeting, and instructions for connecting to the meeting electronically are available on the Township's website under "Minutes and Board Packets" at http://www.uniontownshipmi.com/.

Questions and comments will be received during the public comment sections of the meeting. For participants accessing via computer or smartphone to indicate a desire to address the Planning Commission, please use the "Raise Your Hand" button at the bottom center of the screen. To raise your hand for telephone dial-in participants, press "star" and then the number "nine" (*9). The Chair will call on you by the last three digits of your phone number to invite any comment, at which time you will be unmuted by the meeting moderator.

If there are a large number of participants, the Chair may choose to call on individuals by name or telephone number. Please speak clearly and provide your name and address before making your comments. Please note that the meeting moderator will control the muting and unmuting of participants during public comment.

Written comments to the Planning Commission may also be delivered to the drop box at the Township Hall. Comments received prior to 3:00 p.m. on the day of the meeting will be read aloud to the Planning Commission.

Persons with disabilities needing assistance to participate should call the Township office at (989) 772-4600. Persons requiring speech or hearing assistance may contact the Township through the Michigan Relay Center at 711. A minimum of one (1) business day of advance notice will be necessary for accommodation.

Instructions to Participate in an Electronically Conducted Regular Meeting of the Charter Township of Union Planning Commission

The Charter Township of Union Planning Commission will conduct a regular meeting electronically on Tuesday, May 18, 2021 at 7:00 p.m., consistent with the emergency declarations and direction from state and county health officials to slow the spread of the COVID-19 virus and the Open Meetings Act (Public Act 267 of 1976, as amended).

All interested persons may attend and participate. The public may participate in the meeting by computer and smart phone using the following link to the electronic meeting location: https://us02web.zoom.us/j/89751444718 (Meeting ID: "897 5144 4718" Passcode "038923").

To participate via telephone conference call, please call (312) 626-6799. Enter "897 5144 4718" and the "#" sign at the "Meeting ID" prompt. Lastly, re-enter the "#" sign again at the "Participant ID" prompt to join the meeting.

The moderator will open public access to the electronic meeting space at 6:55 p.m.

Raise Your Hand for Citizen Participation During the Public Comment Periods

Questions and comments will be received during the public comment sections of the meeting. For participants accessing via computer or smartphone to indicate a desire to address the Planning Commission, please **click on the "Raise Your Hand" icon** near the bottom of your screen.



Click "Lower Hand" to lower it if needed. The host will be notified that you have raised your hand. The Mute/Unmute function will be controlled by the meeting moderator.

To raise your hand for telephone dial-in participants, press "star" and then the number "nine" (*9). The Chair will call on you by the last three digits of your phone number to invite any comment, at which time you will be unmuted by the meeting moderator.

Do I need to download the Zoom app to access the meeting? No. Use of the Zoom app is recommended, but you will have options to "download & run Zoom" or "join from your browser" when you click on the link to join the meeting.

Can I Use Bluetooth Headset? Yes, if the Bluetooth device is compatible with the computer or mobile device that you are using.

Do I have to have a webcam to join on Zoom? While you are not required to have a webcam to join a Zoom Meeting, you will not be able to transmit video of yourself. You will continue to be able to listen and speak during public comment and view the webcam video of other participants.

Leaving the Meeting: Click the "Leave Meeting" link at the bottom right corner of the screen at any time to leave the meeting.

Planning Commission
Regular Electronic Meeting. Instructions for access will be posted and available on website (uniontownshipmi.com) home page
May 18, 2021
7:00 p.m.

1. CALL MEETING TO ORDER

2. PLEDGE OF ALLEGIANCE

3. ROLL CALL

4. APPROVAL OF AGENDA

5. APPROVAL OF MINUTES

-April 20, 2021

6. CORRESPONDENCE / BOARD REPORTS / PRESENTATIONS
   A. Cody updates from Board of Trustees
   B. Buckley updates from ZBA
   C. Darin updates from Sidewalk and Pathways

7. PUBLIC COMMENT: Restricted to (3) minutes regarding items not on this agenda

8. NEW BUSINESS
   A. PSPR21-08 McGuirk Mini-Storage Expansion - Final Site Plan
      a. Introduction
      b. Updates from staff and the applicant
      c. Commission deliberation and action (approval, denial, approval with conditions, or postpone action)

   B. PSPR21-09 The Den on Broomfield - Final Site plan
      a. Introduction
      b. Updates from staff and the applicant
      c. Commission deliberation and action (approval, denial, approval with conditions, or postpone action)

   C. PSPR21-10 Broomfield Commons Condominium, 2420 E. Broomfield Rd. Next Phase – Combined Preliminary and Final Site Plan

a. Introduction
b. Updates from staff and the applicant
c. Commission deliberation and action (approval, denial, approval with conditions, or postpone action)

D. PSPR21-11 2266 Northway Dr. - Combined Preliminary and Final Site Plan
a. Introduction
b. Updates from staff and the applicant
c. Commission deliberation and action (approval, denial, approval with conditions, or postpone action)

E. PSUP21-01 Isabella County Jail and Sheriff's Office – Special Use Permit Application (new site)
a. Update from Staff
b. Request to set a public hearing for the regular June 15, 2021 Planning Commission meeting

9. OTHER BUSINESS

A. Master Plan implementation

10. EXTENDED PUBLIC COMMENT: Restricted to 5 minutes regarding any issue

11. FINAL BOARD COMMENT

12. ADJOURNMENT

CHARTER TOWNSHIP OF UNION
Planning Commission
Regular - Electronic Meeting Minutes

A regular-electric meeting of the Charter Township of Union Planning Commission was held on April 20, 2021 as a virtual meeting through the Zoom meeting platform.

Meeting was called to order at 7:02 p.m.

Roll Call
Present:
Albrecht (location: Union Township, Isabella County, Mt. Pleasant, MI)
Buckley (location: Union Township, Isabella County, Mt. Pleasant, MI)
Clerk Cody (location: Union Township, Isabella County, Mt. Pleasant, MI)
Darin (location: Union Township, Isabella County, Mt. Pleasant, MI)
Fuller (location: Union Township, Isabella County, Mt. Pleasant, MI)
LaBelle (location: Union Township, Isabella County, Mt. Pleasant, MI)
Lapp (location: Union Township, Isabella County, Mt. Pleasant, MI)
Shingles (location: Union Township, Isabella County, Mt. Pleasant, MI)
Squattrito (location: Isabella County, Mt. Pleasant, MI)

Others Present
Rodney Nanney, Community and Economic Development Director; Zoning Administrator, Peter Gallinat, and Administrative Assistant, Jennifer Loveberry

Approval of Minutes
Cody moved **Lapp** supported the approval of the March 30, 2021 special meeting as presented.
Vote: Ayes: 9 Nays: 0. Motion carried.

Correspondence / Reports/ Presentations
A. ZBA updates by Buckley – No meeting
B. Sidewalks and Pathway Prioritization updates by Darin
C. Board of Trustee updates by Clerk Cody

Approval of Agenda
Lapp moved **Cody** supported to approve the Agenda as presented. **Vote: Ayes: 9 Nays: 0. Motion Carried.**

Public Comment
Open 7:10 p.m**.**
No comments were offered.
Closed 7:10 p.m.

draft

New Business

Conflict of Interest by Commissioner Lapp acknowledged by the Commissioners. Commissioner Lapp moved to a non-participating audience member.

A. **Application(s) for appointment to the Sidewalks and Pathways Prioritization Committee**

Cody moved **Darin** supported to appoint Jeff Siler as Township Resident to the Sidewalks and Pathways Prioritization Committee with term expiring 8/15/2021. **Roll Call Vote: Ayes: Albrecht, Buckley, Cody, Darin, Fuller, LaBelle, Shingles, and Squattrito Nays: 0. Motion carried.**

Buckley moved **Fuller** supported to appoint Phil Hertzler as Member at Large to the Sidewalks and Pathways Prioritization Committee with term expiring 8/15/2021. **Roll Call Vote: Ayes: Albrecht, Buckley, Cody, Darin, Fuller, LaBelle, Shingles, and Squattrito Nays: 0. Motion carried.**

Commissioner Lapp returned to her role as a participating commission member.

B. **Zoning Ordinance Amendments**

a. Introduction by staff of the memo summarizing the list of proposed amendments

b. Planning Commission review and comment

Discussion was held, with no negative comments about the scope or extent of proposed changes. No formal action taken. The Director indicated that an initial draft set of proposed amendments would be developed and submitted for Commission review at a future meeting.

Other Business

A. Annual election of officers

a. Vice-Secretary

Fuller moved **LaBelle** supported to appoint Shingles as Vice-Secretary per the Planning Commission Bylaws. **Roll Call Vote: Ayes: Albrecht, Buckley, Cody, Darin, Fuller, LaBelle, Lapp, Shingles, and Squattrito Nays: 0. Motion carried.**

B. Annual Review of the Bylaws - Introduction

a. Review of the updated draft bylaws

b. Deliberation and action (motion to adopt the updated bylaws, and to recommend the updated bylaws to the Board of Trustees for final approval)

LaBelle moved **Buckley** supported to adopt the updated bylaws with option B, and to recommend the updated bylaws to the Board of Trustees for final approval). **Roll Call Vote: Ayes: Albrecht, Buckley, Cody, Darin, Fuller, LaBelle, Lapp, Shingles, and Squattrito Nays: 0. Motion carried.**

C. Master Plan implementation (Recurring Agenda item)

Discussion regarding webinar held by Home Builders Association 4/12/2021.

draft

Extended Public Comment
Open –8:40 p.m.
No comments were offered.
Closed – 8:40 p.m.

Final Board Comment
Squattrito commented that Commissioner Lapp and himself attended MDOT's public meeting highlighting the future Pickard Road Project.
Buckley mentioned using social media to spread the word of happenings in the township.

Adjournment – Chairman Squattrito adjourned the meeting at 8:49 p.m.

APPROVED BY: _____

Doug LaBelle - Secretary
Stan Shingles – Vice Secretary

(Recorded by Jennifer Loveberry)

draft

Charter Township Of Union

Board Expiration Dates

Planning Commission Board Members (9 Members) 3 year term			
#	F Name	L Name	Expiration Date
1-BOT Representative	Lisa	Cody	11/20/2024
2-Chair	Phil	Squattrito	2/15/2023
3-Vice Chair	Ryan	Buckley	2/15/2022
4-Secretary	Doug	LaBelle II	2/15/2022
5 - Vice Secretary	Stan	Shingles	2/15/2024
6	Tera	Albrecht	2/15/2024
7	Mike	Darin	2/15/2022
8	Alex	Fuller	2/15/2023
9	Jessica	Lapp	2/15/2023
Zoning Board of Appeals Members (5 Members, 2 Alternates) 3 year term			
#	F Name	L Name	Expiration Date
1- PC Rep	Ryan	Buckley	2/15/2022
2 - Chair	Andy	Theisen	12/31/2022
3 - Vice Chair	Liz	Presnell	12/31/2022
4 - Secretary	vacant seat		12/31/2021
5 - Vice Secretary	Judy	Lannen	12/31/2022
Alt. #1	Brandon	LaBelle	12/31/2022
Alt. #2	vacant seat		2/15/2021
Board of Review (3 Members) 2 year term			
#	F Name	L Name	Expiration Date
1	Doug	LaBelle II	12/31/2022
2	Sarvjit	Chowdhary	12/31/2022
3	Bryan	Neyer	12/31/2022
Alt #1	Randy	Golden	12/31/2022
Construction Board of Appeals (3 Members) 2 year term			
#	F Name	L Name	Expiration Date
1	Colin	Herron	12/31/2021
2	Richard	Jakubiec	12/31/2021
3	Andy	Theisen	12/31/2021
Hannah's Bark Park Advisory Board (2 Members from Township) 2 year term			
1	Mark	Stuhldreher	12/31/2022
2	John	Dinse	12/31/2021
Chippewa River District Library Board 4 year term			
1	Ruth	Helwig	12/31/2023
2	Lynn	Laskowsky	12/31/2021

Charter Township Of Union

Board Expiration Dates

EDA Board Members (11 Members) 4 year term			
#	F Name	L Name	Expiration Date
1-BOT Representative	Bryan	Mielke	11/202024
2	Thomas	Kequom	4/14/2023
3	James	Zalud	4/14/2023
4	Richard	Barz	2/13/2025
5	Robert	Bacon	1/13/2023
6	Marty	Figg	6/22/2022
7	Sarvjit	Chowdhary	1/20/2022
8	Cheryl	Hunter	6/22/2023
9	Jeff	Sweet	2/13/2025
10	vacant seat		2/13/2021
11	David	Coyne	3/26/2022
Mid Michigan Area Cable Consortium (2 Members)			
#	F Name	L Name	Expiration Date
1	Kim	Smith	12/31/2022
2	vacant seat		
Cultural and Recreational Commission (1 seat from Township) 3 year term			
#	F Name	L Name	Expiration Date
1	Robert	Sommerville	12/31/2022
Sidewalks and Pathways Prioritization Committee (2 year term -PC Appointments)			
#	F Name	L Name	Expiration Date
1 - BOT Representative	Kimberly	Rice	11/20/2024
2 - PC Representative	Mike	Darin	8/15/2022
3 - Township Resident	Jeff	Siler	8/15/2021
4 - Township Resident	Jeremy	MacDonald	10/17/2022
5 - Member at large	Phil	Hertzler	8/15/2021
Mid Michigan Aquatic Recreational Authority (2 seat from Township) 3 year term			
#	F Name	L Name	Expiration Date
1 - City of Mt. Pleasant	John	Zang	12/31/2023
2 - City of Mt. Pleasant	Judith	Wagley	12/31/2022
1 -Union Township	Stan	Shingles	12/31/2023
2 - Union Township	Allison	Chiodini	12/31/2022
1- Mt. Pleasant Schools	Lisa	Diaz	12/31/2021

Community and Economic Development Department
2010 S. Lincoln Rd.
Mt. Pleasant, MI 48858
989-772-4600 ext. 232

FINAL SITE PLAN REPORT

TO:	Planning Commission	**DATE:**	May 11, 2021
FROM:	Peter Gallinat, Zoning Administrator	**ZONING:**	B-5 Highway Business District

PROJECT: PSPR21-08 Final Site Plan Approval application for phase 2 of self-storage buildings.

PARCEL(S): PID 14-020-20-001-05

OWNER(S): McGuirk Mini Storage Inc.

LOCATION: Approximately 8.87 acres located at the western dead end of Lexi lane in the NE 1/4 of Section 20.

EXISTING USE: Vacant Property **ADJ. ZONING:** B5, R3A, R1

FUTURE LAND USE DESIGNATION: *Rural Buffer.* Rural Buffer areas generally do not have sewer and water, but are appropriate for agricultural, low density residential, and other uses allowed by zoning. Typically this buffer is located on the fringe between rural and more urbanized areas. Rezoning requests for more intensive uses should be limited, especially those requiring extended utility service.

ACTION REQUESTED: To review and take action to approve, deny, or approve with conditions the PSPR21-08 final site plan dated April 23, 2021 for self-storge units located at Lexi Lane. in the NE 1/4 of Section 20 and in the B-5 (Highway Business) zoning district.

Final Site Plan Review Comments

The following comments are based on the standards for final site plan approval and specific elements of the proposed site plan:

1. **Section 14.2.P. (Required Site Plan Information).** With the exception of remaining details noted elsewhere in this report, the final site plan is sufficiently complete for Planning Commission review and action.

2. **Section 8 (Environmental Performance Standards).** Applicant has completed the hazardous substance reporting form and EGLE permit checklist confirming that no hazardous materials will be stored on site.

3. **Section 9 (Off-Street Parking).** 0.1 spaces are required per storage unit plus 5 spaces for the office. The term “storage unit” is undefined, so the Zoning Administrator made a determination that it referred to individual storage buildings on the site, rather than to easily reconfigurable spaces within each building. There are 12 buildings proposed which would require 1 parking space. Plus 5 for the office equals a total of 6 parking spaces required. Six parking spaces of sufficient size and location are shown on page 4 of 9.

4. **Section 10. – Landscaping and Screening.** The landscape plan on page 4 of 9 conforms to the requirements for screening in section 6.38.C. and section 10.2.E.

5. **Section 7.10 (Sidewalks and Pathways).** Applicant has not shown sidewalks on this plan. The parcel is located at the end of Lexi Lane. Due to this dead end, there is no requirement to construct sidewalks along Lexi Lane at this time.

6. **Section 6.38 (Self Storage Buildings).** The proposed site plan conforms to the requirements for roof design, ingress/egress, building dimensions, prohibited storage, outside storage, limitations of use and hard surfacing, and screening.

7. **Consistency with the Master Plan.** This parcel was rezoned from R-3A to B-5. There is sufficient capacity available in the municipal water, municipal sewer, and other utility infrastructure available to the site to support the uses permitted in a B-5 district. The parcel abuts the line of the Township's planned growth management boundary. The plan is consistent with the Master Plan.

8. **Section 8.2 - Exterior lighting.** A photometric plan has been submitted attached to the site plan which indicates compliance with the maximum light intensity (footcandle) limits. However, it is unclear how this was determined, since the specific type of wall pack lighting is identified on the plan. Plan does note that the lighting will conform to the standards in section 8.2. <u>The following detail must be addressed by the applicant prior to issuance of a building permit for this project</u>:

   - ❑ Details and manufacturer's specification sheets for the proposed exterior wall-pack fixtures and an updated photometric plan sheet referencing the specific fixtures must be submitted to the Zoning Administrator for administrative review and acceptance prior to issuance of a building permit for this project.

9. **Outside agency approvals.** The applicant shall be responsible for obtaining all necessary permits or approvals from applicable outside agencies, prior to final site plan approval. Approvals from the Mt. Pleasant Fire Department, Storm Water approval from the Isabella County Drain office, and Isabella County Transportation Commission have been received by the Township. The final stie plan has also been submitted to the Township's Public Services Department for review, with approval pending.

Objective

The Planning Commission shall review the application materials and site plan, together with any reports and recommendations. The Planning Commission shall identify and evaluate all relevant factors and shall then take action by motion to approve the site plan, to approve the site plan with conditions, to deny the site plan application, or to postpone further consideration of the site plan to a date certain in accordance with Section 14.2.H. of the Zoning Ordinance.

Key Findings

1. The site plan is missing information on the type of and details of proposed exterior lighting fixtures, but is otherwise in compliance with Section 14.2.P. (Required Site Plan Information).
2. With the exception of the Township's Public Service Department, documentation of the applicable outside agency permits or approvals have been received by the Zoning Administrator.
3. The project is consistent with the Master Plan.
4. The proposed buildings are a continuation of the existing self-storage business to the north.
5. With the exception of the pending Township Public Services Department approval, the final site plan is fully consistent with Section 14.2.S. (Standards for Site Plan Approval).

Recommendations

Based on the above findings, I would ask that the Planning Commission consider taking action to approve the PSPR21-08 final site plan, subject to the following conditions:

1. Township Public Services Department approval.
2. Details and manufacturer's specification sheets for the proposed exterior wall-pack fixtures and an updated photometric plan sheet referencing the specific fixtures shall be submitted to the Zoning Administrator for administrative review and acceptance prior to issuance of a building permit for this project

Please contact me at (989) 772-4600 ext. 241, or via email at pgallinat@uniontownshipmi.com, with any questions about this information.

Respectfully submitted,

Peter Gallinat, Zoning Administrator
Community and Economic Development Department

RECEIVED
APR 23 2021
BY:

Charter Township of Union

APPLICATION FOR SITE PLAN REVIEW

☐ Minor Site Plan ☐ Preliminary Site Plan ☑ Final Site Plan

A Completed Application will contain all the information required per the Zoning Ordinance, Section 14.2 (Site Plan Review).

Name of Proposed Development/Project: SITE PLAN FOR PHASE 2 - STORAGE UNITS
Common Description of Property & Address (if issued): _____

Applicant's Name(s): MCGUIRK MINI STORAGE
Phone/Fax numbers: 989-772-1309 Email: chuck@mcguirksand.com
Address: 3046 JENS WAY City: MT. PLEASANT Zip: 48858

Legal Description: ☐ Attached ☑ Included on Site Plan Tax Parcel ID Number(s): 14-020-20-001-11
Existing Zoning: B-5 Land Acreage: 8.87 Existing Use(s): VACANT LAND & STORAGE
☑ **ATTACHED: Letter describing the project and how it conforms to Section 14.2.S. (Standards for Site Plan Approval)**
SEE PAGE 4 OF SITE PLAN FOR PROJECT DESCRIPTION

Firm(s) or Individuals(s) who prepared site plan(s)	1. Name: CMS&D Phone: 9897750756 Email: tbebee@cms-d.com 2. Address: 2257 EAST BROOMFIELD ROAD City: MT. PLEASANT State: _____ Zip: 48858 Contact Person: TIMOTHY BEBEE Phone 9897750756
Legal Owner(s) of Property. All persons having legal interest in the property must sign this application. Attach a separate sheet if more space is needed.	1. Name: MCGUIRK MINI STORAGE Phone: 989-772-1309 Address: 3046 JENS WAY City: MT. PLEASANT State: MI Zip: 48858 Signature: _____ Interest in Property: OWNER 2. Name: _____ Phone: _____ Address: _____ City: _____ State: _____ Zip: _____ Signature: _____ Interest in Property: _____

I do hereby affirm that all the statements, signatures, descriptions, exhibits submitted on or with this application are true and accurate to the best of my knowledge and that I am authorized to file this application and act on behalf of all the owners of the property. False or inaccurate information placed upon this plan may be cause for revocation of any permits issued pursuant to site plan approval and/or removal of work installed. Approval of this plan shall not constitute the right to violate any provisions of the Zoning Ordinance or other applicable codes and ordinances.

_____
Signature of Applicant Date

Office Use Only

Application Received By: _____ Fee Paid: $_____

Date Received: _____ Escrow Deposit Paid: $_____

CHARTER TOWNSHIP OF UNION

SITE PLAN REVIEW
HAZARDOUS SUBSTANCES REPORTING FORM

This form must be completed and submitted as part of the site plan for facilities which may use, store, or generate hazardous substances or polluting materials (including petroleum-based products)

Name of business: MCGUIRK MINI STORAGE

Name of business owner(s): CHUCK MCGUIRK

Street and mailing address: 3046 JENS WAY
MT. PLEASANT, MI 48858

Telephone: 989-772-1309

Fax: _____

Email: chuck@mcguirksand.com

I affirm that the information submitted is accurate.

Owner(s) signature and date:

_____

_____

Information compiled by:

Central Michigan Surveying & Development Co. Inc.

_____

Types and Quantities of Hazardous Substances and Polluting Materials Used, Stored or Generated On-Site

Please list the hazardous substances and polluting materials (including chemicals, hazardous materials, petroleum products, hazardous wastes and other polluting materials) which are expected to be used, stored or generated on -site. Quantities should reflect the maximum volumes on hand at any time. Attach additional pages if necessary to list all hazardous substances and polluting materials.

COMMON NAME	CHEMICAL NAME (components)	FORM	MAX QUANTITY ON HAND AT ONE TIME	TYPE OF STORAGE CONTAINERS
N/A				
____ NONE	KEY: LIQ. = liquid P.LIQ = pressurized liquid S = solids G = gas PG = pressurized gas			KEY: AGT = above ground tank DM = drums UGT = underground tank Cy = cylinders CM = metal cylinders CW = wooden or composition container TP = portable tank

PERMIT INFORMATION CHECKLIST FOR FINAL SITE PLANS

Michigan.gov/EGLEpermits

The Michigan Department of Environment, Great Lakes, and Energy (EGLE) has prepared a list of key questions to help identify what EGLE permits, licenses, or approvals of a permit-like nature may be needed. By contacting the appropriate offices indicated, you will help reduce the possibility that your project or activity will be delayed due to the untimely discovery of additional permitting requirements later in the construction process. While this list covers the existence of permits and approvals required from EGLE, it is not a comprehensive list of all legal responsibilities. A useful way to learn whether other requirements will apply is to go through the Self-Environmental Assessment in the Michigan Guide to Environmental, Health, and Safety Regulations, online at: Michigan.gov/EHSguide. Please call the Environmental Assistance Center at 800-662-9278 to talk with any of the EGLE programs noted below. [insertions and edits by Union Township]

How Do I Know that I Need a State of Michigan, County or Local Permit or Approval?	Yes ☐	No ☐
1) Will your business involve the installation or construction of any process equipment that has the potential to emit air contaminants (e.g. dry sand blasting, boilers, standby generators)? Air Quality Permit to Install, Air Quality Division (AQD), Permit Section	Y☐	N☒
2) Does the project involve renovating or demolishing all or portions of a building? Notification is required for asbestos removal and required for all demolitions even if the structure never contained asbestos. Asbestos Notification, AQD, Asbestos Program, 517-284-6777	Y☐	N☒
3) Please consult the Permitting at the Land and Water Interface Decision Tree document to evaluate whether your project needs a land and water management permit (i.e., Does the project involve filling, dredging, placement of structures, draining, or use of a wetland?). Land and Water Featured Programs (Water Resources Division - WRD) - Joint Permit Application, 517-284-5567:		
a. Does the project involve construction of a building or septic system in a designated Great Lakes high risk erosion area?	Y☐	N☒
b. Does the project involve dredging, filling, grading, or other alteration of the soil, vegetation, or natural drainage, or placement of permanent structures in a designated environmental area?	Y☐	N☒
c. Does the project propose any development, construction, silvicultural activities or contour alterations within a designated critical dune area?	Y☐	N☒
d. Does the project involve construction of a dam, weir or other structure to impound flow?	Y☐	N☒
4) Does the project involve an earth change activity (including land balancing, demolition involving soil movement, and construction) or does the project involve construction which will disturb one or more acres that come into contact with storm water that enters a storm sewer, drain, lake, stream, or other surface water? **Union Township and Isabella County**	Y☒	N☐
5) Does the project involve the construction or alteration of a water supply system system? **Union Township Public Services Department** and Drinking Water & Environmental Health Division (DWEHD), 517-284-6524	Y☒	N☐
6) Does the project involve construction or alteration of any sewage collection or treatment facility? **Union Township Public Services Department** and WRD, Part 41 Construction Permit Program (staff), 906-228-4527, or EGLE District Office	Y☐	N☒
7) Public Swimming Pool Construction (Spas/Hot Tubs) Permits: Will your business involve the construction or modification of a public swimming pool, spa or hot tub? **Union Township** and Public Swimming Pool Program, 517-284-6541, or EGLE District Office	Y☐	N☒
8) Does the project involve the construction or modification of a campground? **Union Township** and DWEHD,Campgrounds program, 517-284-6529	Y☐	N☒

9) Does the project involve construction of a facility that landfills, transfers, or processes of any type of solid non-hazardous waste on-site, or places industrial residuals/sludge into or onto the ground? Materials Management Division (MMD), Solid Waste, 517-284-6588, or EGLE District Office	Y☐	N☒
10) Does the project involve the construction of an on-site treatment, storage, or disposal facility for hazardous waste? MMD, Hazardous Waste Section, Treatment, Storage and Disposal, 517-284-6562	Y☐	N☒
Who Regulates My Drinking (Potable) Water Supply?		
11) I am buying water from the municipal water supply system Contact the **Union Township Public Services Dept.**	Y☒	N☐
12) I have a Non-Community Water Supply (Type II) Guide, Contact (District or County) Local Health Department, 517-485-0660	Y☐	N☒
13) I am a community water supply (Type I) Community Water Supply, DWEHD District Office Community Water Supply Program, 517-284-6512	Y☐	N☒
14) Do you desire to develop a withdrawal of over 2,000,000 gallons of water per day from any source including groundwater, inland surface water, or the Great Lakes and their connecting waterways? WRD, Great Lakes Shorelands Unit, Water Use Program, 517-284-5563	Y☐	N☒
Who Regulates My Wastewater Discharge System?		
15) NPDES: Does the project involve the discharge of any type of wastewater to a storm sewer, drain, lake, stream, or other surface water? WRD, EGLE District Office, or National Pollutant Discharge Elimination (NPDES) Permit Program, 517-284-5568	Y☐	N☒
16) Does the facility have industrial activity that comes into contact with storm water that enters a storm sewer, drain, lake, stream, or other surface water? WRD, Permits Section, or EGLE District Office, 517-284-5588	Y☐	N☒
17) Does the project involve the discharge of wastewaters into or onto the ground (e.g. subsurface disposal or irrigation)? WRD, Groundwater Permits Program, 517-290-2570	Y☐	N☒
18) Does the project involve the drilling or deepening of wells for waste disposal? Oil, Gas and Minerals Division (OGMD), 517-284-6841	Y☐	N☒
What Operational Permits Are Relevant to My Operation and Air Emissions?		
19) Renewable Operating Permit: Does your facility have the potential to emit any of the following: 100 tons per year or more of any criteria pollutant; 10 tons per year or more of any hazardous air pollutant; or 25 tons per year or more of any combination of hazardous air pollutants? AQD, Permit Section, 517-284-6634	Y☐	N☒
20) Does your facility have an electric generating unit that sells electricity to the grid and burns a fossil fuel? AQD, Acid Rain Permit Program, 517-780-7843	Y☐	N☒
What Operational Permits Are Relevant to My Waste Management?		
21) Does the project involve landfilling, transferring, or processing of any type of solid non-hazardous waste on-site, or placing industrial residuals/sludge into or onto the ground? MMD, 517-284-6588 or EGLE District Office	Y☐	N☒
22) Does the project involve the on-site treatment, storage, or disposal of hazardous waste? MMD, Hazardous and Liquid Waste, 517-284-6562	Y☐	N☒
23) Does the project require a site identification number (EPA number) for regulated waste activities (used oil, liquid waste, hazardous waste, universal waste, PCBs)? (Hazardous Waste Program Forms & License Applications) MMD, EGLE District Office, 517-284-6562	Y☐	N☒

24) Does the project involve the receipt, possession, manufacture, use, storage, transport, transfer, release, or disposal of radioactive material in any form? MMD, Radioactive Material and Standards Unit, 517-284-6581	Y☐	N☒
25) Does the project involve decommissioning or decontamination of tanks, piping, and/or appurtenances that may have radioactive levels above background? MMD Radioactive Material and Standards Unit, 517-284-6581	Y☐	N☒
26) Does the project involve the generation of medical waste or a facility that treats medical waste prior to its disposal? MMD, Medical Waste Regulatory Program, 517-284-6594	Y☐	N☒
What Sector-Specific Permits May be Relevant to My Business?		
Transporters	Y☐	N☒
27) Does the project involve the *transport* of some other facility's non-hazardous liquid waste? MMD, Transporter Program, 517-284-6562	Y☐	N☒
28) Does the project involve the *transport* of hazardous waste? MMD, Transporter Program, 517-284-6562	Y☐	N☒
29) Do you engage in the business of transporting bulk water for drinking or household purposes (except for your own household use)? DWEHD, Water Hauler Information, 517-284-6527	Y☐	N☒
30) Does the project involve *transport* of septic tank, cesspool, or dry well contents or the discharge of septage or sewage sludge into or onto the ground? DWEHD, Septage Program, 517-284-6535	Y☐	N☒
31) Do you store, haul, shred or process *scrap tires*? MMD, Scrap Tire Program, 517-284-6586	Y☐	N☒
Sectors		
32) Is the project a *dry cleaning* establishment utilizing perchloroethylene or a flammable solvent in the cleaning process? AQD, Dry Cleaning Program, 517-284-6780	Y☐	N☒
33) Does your *laboratory* test potable water as required for compliance and monitoring purposes of the Safe Drinking Water Act? Laboratory Services Certifications, 517-284-5424	Y☐	N☒
34) Does the project involve the operation of a *public swimming pool*? DWEHD, Public Swimming Pools Program, 517-284-6529	Y☐	N☒
35) Does the project involve the operation of a *campground*? **Union Township** and DWEHD, Campgrounds, 517-284-6529	Y☐	N☒
What Permits Do I Need to Add Chemicals to Lakes and Streams?		
36) Are you applying a chemical treatment for the purpose of aquatic nuisance control (pesticide/herbicide etc.) in a water body (i.e. lake, pond or river)? WRD, Aquatic Nuisance Control , 517-284-5593	Y☐	N☒
37) Are you applying materials to a water body for a water resource management project (i.e. mosquito control treatments, dye testing, or fish reclamation projects)? WRD, Surface Water Assessment Section, 517-331-5228	Y☐	N☒

Why would I be subject to Oil, Gas and Mineral Permitting?		
38) Do you want to operate a central production facility (applies to oil and gas production facilities where products of diverse ownership are commingled)? OGMD, Petroleum Geology and Production Unit, 517-284-6826	Y☐	N☒
39) Does the project involve the removal of sand from a sand dune area within two (2) miles of a Great Lakes shoreline? OGMD, Minerals and Mapping Unit, Sand Dune Mining Program, 517-284-6826	Y☐	N☒
40) Does the project involve decommissioning or decontamination of tanks, piping, and/or appurtenances that may have radioactive levels above background? MMD, Radioactive Protection Programs, 517-284-6581	Y☐	N☒
Petroleum & Mining, OGMD, 517-284-6826		
41) Does the project involve the diversion and control of water for the mining and processing of low-grade iron ore?	Y☐	N☒
42) Does the project involve the surface or open-pit mining of metallic mineral deposits?	Y☐	N☒
43) Does the project involve the mining of nonferrous mineral deposits at the surface or in underground mines?	Y☐	N☒
44) Does the project involve mining coal?	Y☐	N☒
45) Does the project involve changing the status or plugging of a mineral well?	Y☐	N☒
46) Does the project involve the drilling or deepening of wells for brine production, solution mining, storage, or as test wells?	Y☐	N☒

Contact **Union Township** and EGLE Permits & Bonding, OGMD, 517-284-6841

DIALux
04 / 15 / 2021

Operator
Telephone
Fax
e-Mail

Table of contents

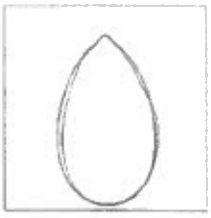
Project 1
Project Cover 1
Table of contents 2
Luminaire parts list 3
RWP02-80W
Luminaire Data Sheet 4
RWP02-40W
Luminaire Data Sheet 5
Exterior Scene 1
Luminaires (coordinates list) 6
3D Rendering 10
False Color Rendering 11
Exterior Surfaces
field
Surface 1
Isolines (E) 12
Value Chart (E) 13
Calculation Surface 1
Value Chart (E, Perpendicular) 14
Calculation Surface 1
Value Chart (E, Perpendicular) 15
Calculation Surface 1
Value Chart (E, Perpendicular) 16
Calculation Surface 1
Value Chart (E, Perpendicular) 17
Calculation Surface 1
Value Chart (E, Perpendicular) 18
Calculation Surface 1
Value Chart (E, Perpendicular) 19

Operator
Telephone
Fax
e-Mail

Project 1 / Luminaire parts list

89 Pieces RWP02-40W
Article No.:
Luminous flux (Luminaire): 4904 lm
Luminous flux (Lamps): 4904 lm
Luminaire Wattage: 39.1 W
Luminaire classification according to CIE: 100
CIE flux code: 82 98 100 100 100
Fitting: 1 x User defined (Correction Factor 1.000).

See our luminaire catalog for an image of the luminaire.



26 Pieces RWP02-80W
Article No.:
Luminous flux (Luminaire): 10059 lm
Luminous flux (Lamps): 10061 lm
Luminaire Wattage: 79.2 W
Luminaire classification according to CIE: 100
CIE flux code: 80 97 100 100 100
Fitting: 1 x User defined (Correction Factor 1.000).

See our luminaire catalog for an image of the luminaire.

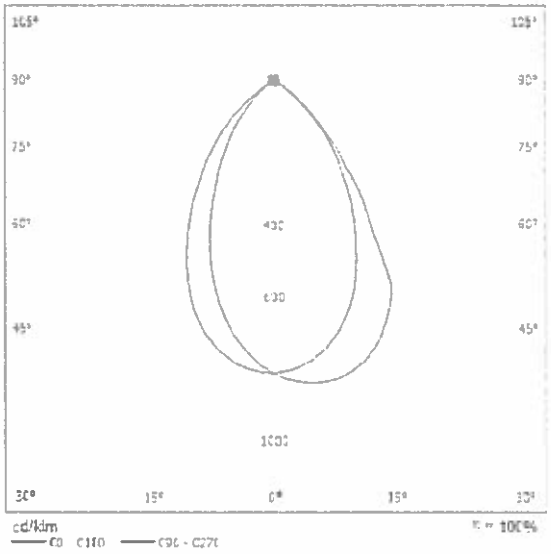


Operator
Telephone
Fax
e-Mail

RWP02-80W / Luminaire Data Sheet

See our luminaire catalog for an image of the luminaire.

Luminous emittance 1:



Luminaire classification according to CIE: 100
CIE flux code: 80 97 100 100 100

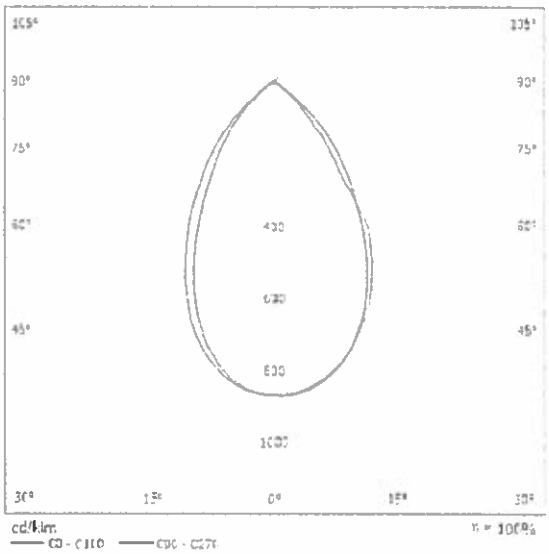
Due to missing symmetry properties, no UGR table can be displayed for this luminaire.

Operator
Telephone
Fax
e-Mail

RWP02-40W / Luminaire Data Sheet

See our luminaire catalog for an image of the luminaire.

Luminous emittance 1:



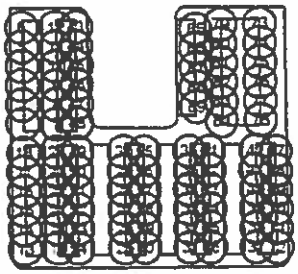
Luminaire classification according to CIE: 100
CIE flux code: 82 98 100 100 100

Due to missing symmetry properties, no UGR table can be displayed for this luminaire.

Operator
Telephone
Fax
e-Mail

Exterior Scene 1 / Luminaires (coordinates list)

RWP02-40W
4904 lm, 39.1 W, 1 x 1 x User defined (Correction Factor 1.000).



No.	Position [ft]			Rotation [°]		
	X	Y	Z	X	Y	Z
1	5.405	299.034	7.200	0.0	-30.0	-179.1
2	4.789	339.020	7.200	0.0	-30.0	-179.1
3	4.173	379.005	7.200	0.0	-30.0	-179.1
4	3.556	418.991	7.200	0.0	-30.0	-179.1
5	2.940	458.976	7.200	0.0	-30.0	-179.1
6	2.324	498.962	7.200	0.0	-30.0	-179.1
7	75.618	299.633	7.200	0.0	-30.0	-179.1
8	75.001	339.618	7.200	0.0	-30.0	-179.1
9	74.385	379.604	7.200	0.0	-30.0	-179.1
10	73.769	419.589	7.200	0.0	-30.0	-179.1
11	73.153	459.575	7.200	0.0	-30.0	-179.1
12	72.537	499.560	7.200	0.0	-30.0	-179.1
13	10.399	39.142	7.200	0.0	-30.0	-179.1
14	9.782	79.128	7.200	0.0	-30.0	-179.1
15	9.166	119.113	7.200	0.0	-30.0	-179.1
16	8.550	159.099	7.200	0.0	-30.0	-179.1
17	7.934	199.084	7.200	0.0	-30.0	-179.1
18	7.318	239.070	7.200	0.0	-30.0	-179.1
19	79.446	41.105	7.200	0.0	-30.0	-179.1
20	78.830	81.091	7.200	0.0	-30.0	-179.1
21	78.214	121.076	7.200	0.0	-30.0	-179.1
22	77.598	161.062	7.200	0.0	-30.0	-179.1
23	76.982	201.047	7.200	0.0	-30.0	-179.1
24	76.365	241.033	7.200	0.0	-30.0	-179.1
25	219.143	42.811	7.200	0.0	-30.0	-179.1
26	218.526	82.797	7.200	0.0	-30.0	-179.1
27	217.910	122.782	7.200	0.0	-30.0	-179.1
28	217.294	162.768	7.200	0.0	-30.0	-179.1

Operator
Telephone
Fax
e-Mail

Exterior Scene 1 / Luminaires (coordinates list)

No.	Position [ft]			Rotation [°]		
	X	Y	Z	X	Y	Z
29	216.678	202.753	7.200	0.0	-30.0	-179.1
30	216.062	242.739	7.200	0.0	-30.0	-179.1
31	357.858	44.472	7.200	0.0	-30.0	-179.1
32	357.242	84.457	7.200	0.0	-30.0	-179.1
33	356.625	124.443	7.200	0.0	-30.0	-179.1
34	356.009	164.429	7.200	0.0	-30.0	-179.1
35	355.393	204.414	7.200	0.0	-30.0	-179.1
36	354.777	244.400	7.200	0.0	-30.0	-179.1
37	497.538	45.998	7.200	0.0	-30.0	-179.1
38	496.922	85.983	7.200	0.0	-30.0	-179.1
39	496.306	125.969	7.200	0.0	-30.0	-179.1
40	495.690	165.954	7.200	0.0	-30.0	-179.1
41	495.074	205.940	7.200	0.0	-30.0	-179.1
42	494.458	245.925	7.200	0.0	-30.0	-179.1
43	114.825	500.957	7.200	0.0	-30.0	0.9
44	115.437	461.093	7.200	0.0	-30.0	0.9
45	116.049	421.230	7.200	0.0	-30.0	0.9
46	116.661	381.366	7.200	0.0	-30.0	0.9
47	117.273	341.503	7.200	0.0	-30.0	0.9
48	117.885	301.639	7.200	0.0	-30.0	0.9
49	118.849	241.085	7.200	0.0	-30.0	0.9
50	119.461	201.222	7.200	0.0	-30.0	0.9
51	120.073	161.358	7.200	0.0	-30.0	0.9
52	120.685	121.495	7.200	0.0	-30.0	0.9
53	121.296	81.631	7.200	0.0	-30.0	0.9
54	121.908	41.768	7.200	0.0	-30.0	0.9
55	258.834	242.660	7.200	0.0	-30.0	0.9
56	259.446	202.797	7.200	0.0	-30.0	0.9
57	260.058	162.933	7.200	0.0	-30.0	0.9
58	260.670	123.070	7.200	0.0	-30.0	0.9
59	261.282	83.206	7.200	0.0	-30.0	0.9
60	261.894	43.343	7.200	0.0	-30.0	0.9
61	397.280	244.452	7.200	0.0	-30.0	0.9
62	397.892	204.589	7.200	0.0	-30.0	0.9
63	398.504	164.725	7.200	0.0	-30.0	0.9
64	399.116	124.862	7.200	0.0	-30.0	0.9
65	399.728	84.998	7.200	0.0	-30.0	0.9
66	400.340	45.135	7.200	0.0	-30.0	0.9

Operator
Telephone
Fax
e-Mail

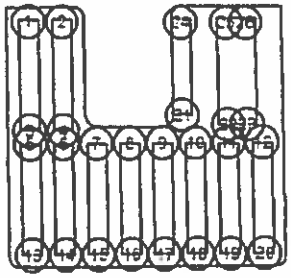
Exterior Scene 1 / Luminaires (coordinates list)

No.	Position [ft]			Rotation [°]		
	X	Y	Z	X	Y	Z
67	537.055	244.563	7.200	0.0	-30.0	0.9
68	537.667	204.699	7.200	0.0	-30.0	0.9
69	538.279	164.836	7.200	0.0	-30.0	0.9
70	538.891	124.972	7.200	0.0	-30.0	0.9
71	539.503	85.109	7.200	0.0	-30.0	0.9
72	540.115	45.245	7.200	0.0	-30.0	0.9
73	502.384	510.330	15.500	0.0	-30.0	0.9
74	502.996	470.261	15.500	0.0	-30.0	0.9
75	503.608	430.192	15.500	0.0	-30.0	0.9
76	504.220	390.123	15.500	0.0	-30.0	0.9
77	504.832	350.054	15.500	0.0	-30.0	0.9
78	505.444	309.986	15.500	0.0	-30.0	0.9
79	420.638	508.296	15.500	0.0	-30.0	-179.1
80	421.250	468.228	15.500	0.0	-30.0	-179.1
81	421.862	428.159	15.500	0.0	-30.0	-179.1
82	422.474	388.090	15.500	0.0	-30.0	-179.1
83	423.086	348.021	15.500	0.0	-30.0	-179.1
84	423.698	307.952	15.500	0.0	-30.0	-179.1
85	367.738	497.790	15.500	0.0	-30.0	0.9
86	368.362	457.817	15.500	0.0	-30.0	0.9
87	368.986	417.844	15.500	0.0	-30.0	0.9
88	369.610	377.870	15.500	0.0	-30.0	0.9
89	370.234	337.897	15.500	0.0	-30.0	0.9

Operator
Telephone
Fax
e-Mail

Exterior Scene 1 / Luminaires (coordinates list)

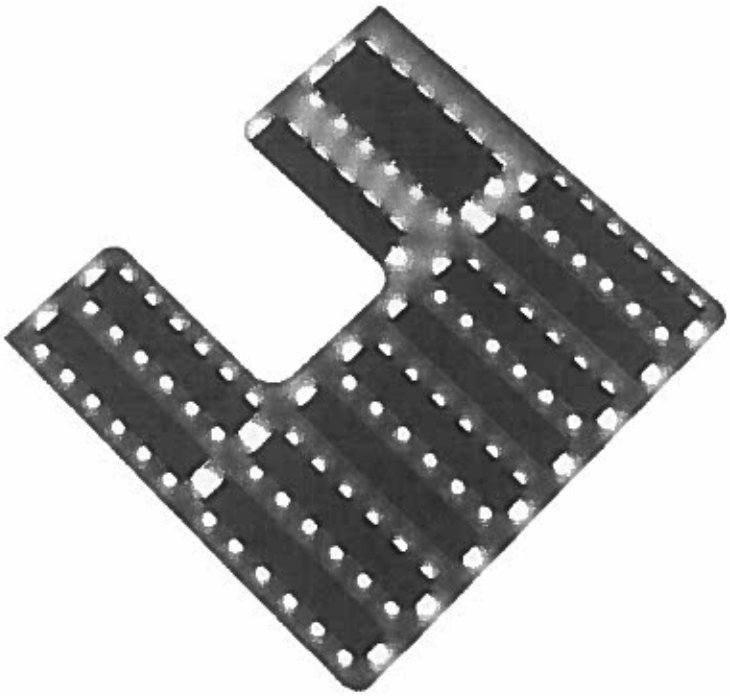
RWP02-80W
10059 lm, 79.2 W, 1 x 1 x User defined (Correction Factor 1.000).



No.	Position [ft]			Rotation [°]		
	X	Y	Z	X	Y	Z
1	23.323	514.662	11.700	0.0	-30.0	90.0
2	93.421	515.382	11.700	0.0	-30.0	90.0
3	26.837	283.284	11.700	0.0	-30.0	-90.0
4	97.356	284.157	11.700	0.0	-30.0	-90.0
5	27.735	255.926	11.700	0.0	-30.0	90.7
6	97.492	256.820	11.700	0.0	-30.0	90.7
7	167.248	257.714	11.700	0.0	-30.0	90.7
8	237.005	258.607	11.700	0.0	-30.0	90.7
9	306.761	259.501	11.700	0.0	-30.0	90.7
10	376.518	260.395	11.700	0.0	-30.0	90.7
11	446.274	261.289	11.700	0.0	-30.0	90.7
12	516.030	262.183	11.700	0.0	-30.0	90.7
13	32.424	24.758	11.700	0.0	-30.0	-89.3
14	102.180	25.652	11.700	0.0	-30.0	-89.3
15	171.937	26.546	11.700	0.0	-30.0	-89.3
16	241.693	27.440	11.700	0.0	-30.0	-89.3
17	311.450	28.334	11.700	0.0	-30.0	-89.3
18	381.206	29.228	11.700	0.0	-30.0	-89.3
19	450.963	30.122	11.700	0.0	-30.0	-89.3
20	520.719	31.016	11.700	0.0	-30.0	-89.3
21	349.269	317.637	15.500	0.0	-30.0	-90.0
22	445.144	298.467	15.500	0.0	-30.0	-90.0
23	485.299	299.173	15.500	0.0	-30.0	-90.0
24	345.477	518.717	15.500	0.0	-30.0	90.0
25	441.137	519.691	15.500	0.0	-30.0	90.0
26	481.293	520.663	15.500	0.0	-30.0	90.0

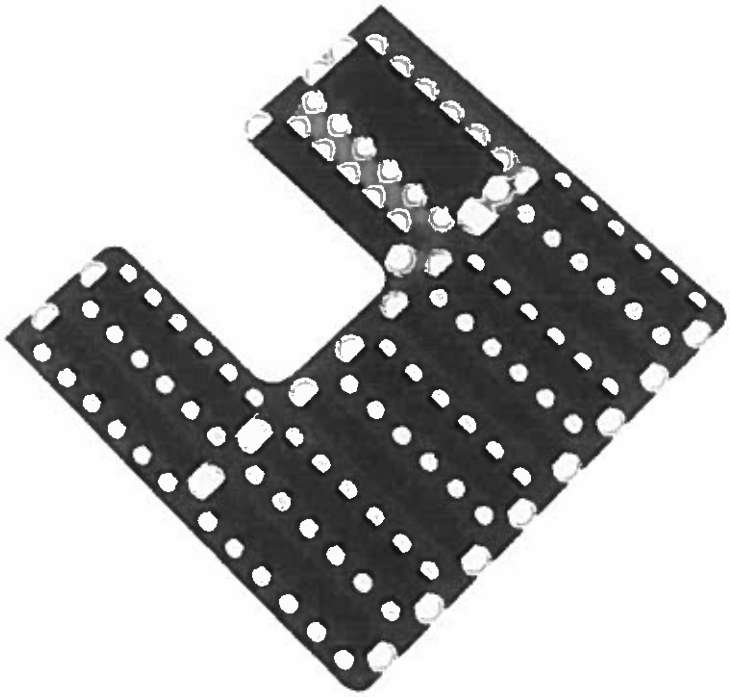
Operator
Telephone
Fax
e-Mail

Exterior Scene 1 / 3D Rendering



Operator
Telephone
Fax
e-Mail

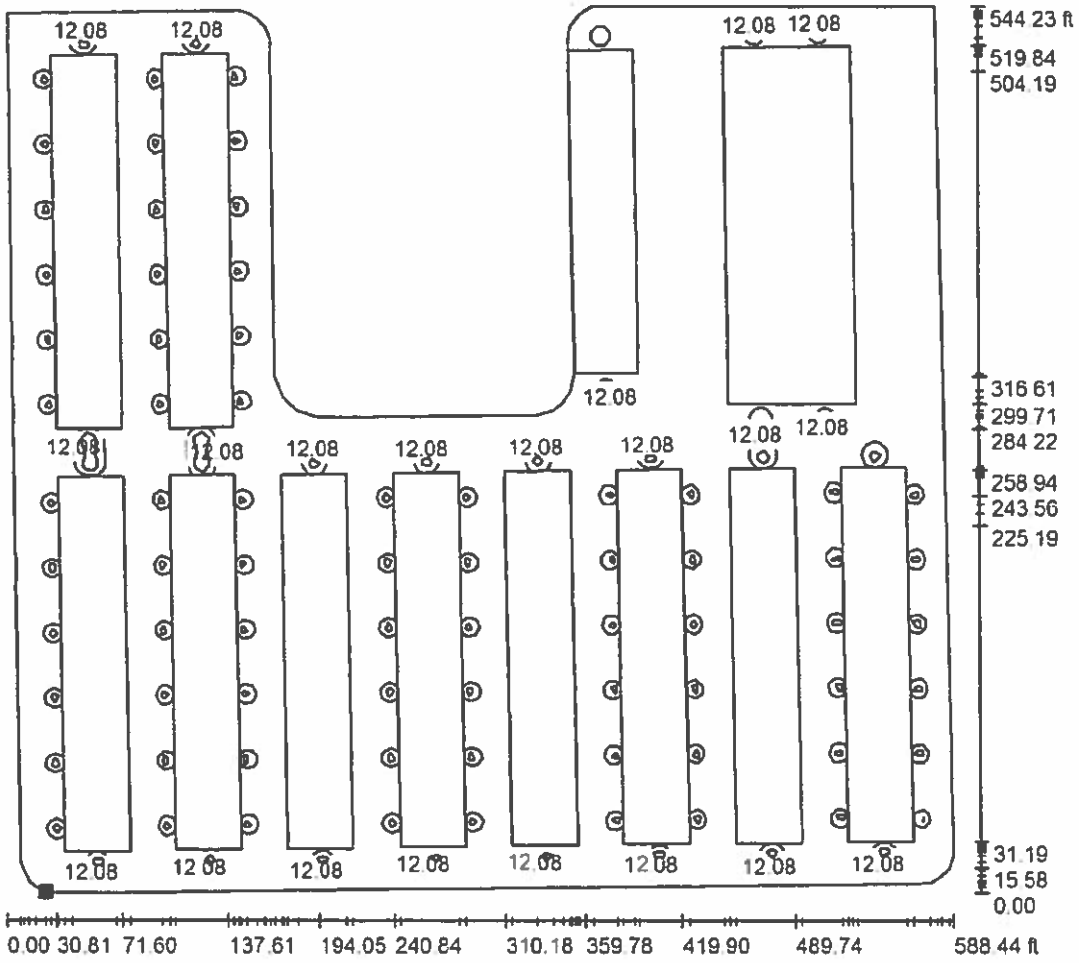
Exterior Scene 1 / False Color Rendering





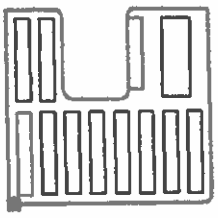
Operator
Telephone
Fax
e-Mail

Exterior Scene 1 / field / Surface 1 / Isolines (E)



Values in Footcandles, Scale 1 : 1297

Position of surface in external scene:
Marked point:
(0.000 ft, 0.000 ft, 0.000 ft)

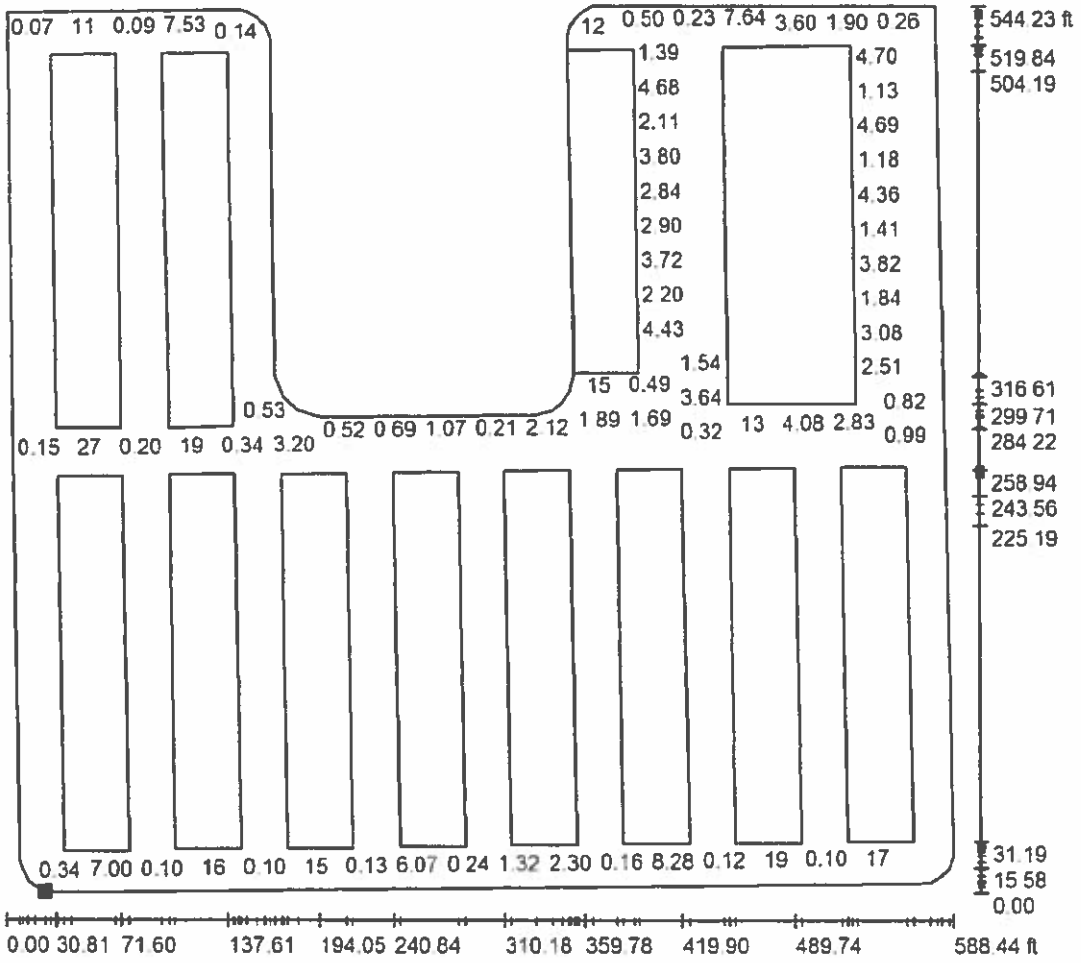


Grid: 128 x 128 Points

E_{av} [fc]	E_{min} [fc]	E_{max} [fc]	u0	E_{min} / E_{max}
3.53	0.03	56	0.009	0.001

Operator
Telephone
Fax
e-Mail

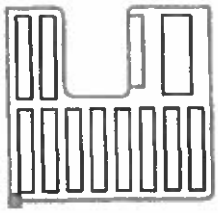
Exterior Scene 1 / field / Surface 1 / Value Chart (E)



Values in Footcandles, Scale 1 : 1297

Not all calculated values could be displayed.

Position of surface in external scene:
Marked point:
(0.000 ft, 0.000 ft, 0.000 ft)

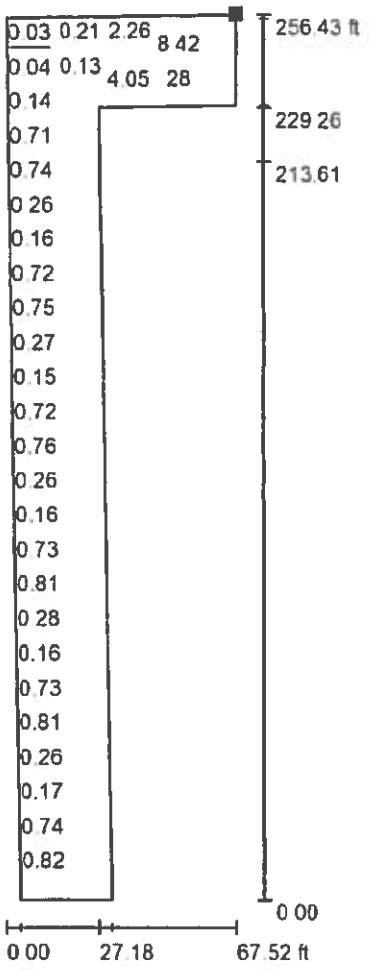


Grid: 128 x 128 Points

E_{av} [fc]	E_{min} [fc]	E_{max} [fc]	u0	E_{min} / E_{max}
3.53	0.03	56	0.009	0.001

Operator
Telephone
Fax
e-Mail

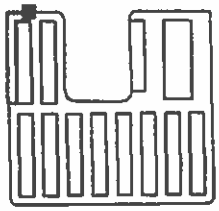
Exterior Scene 1 / Calculation Surface 1 / Value Chart (E, Perpendicular)



Values in Footcandles, Scale 1 : 612

Not all calculated values could be displayed.

Position of surface in external scene:
Marked point:
(43.494 ft, 540.657 ft, 0.100 ft)

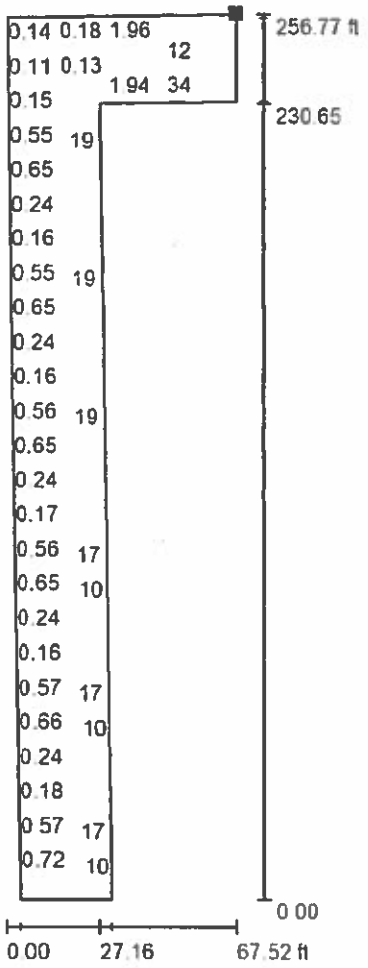


Grid: 128 x 128 Points

E_{av} [fc]	E_{min} [fc]	E_{max} [fc]	u0	E_{min} / E_{max}
3.74	0.03	57	0.008	0.001

Operator
Telephone
Fax
e-Mail

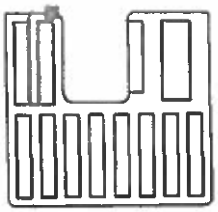
Exterior Scene 1 / Calculation Surface 1 / Value Chart (E, Perpendicular)



Values in Footcandles, Scale 1 : 613

Not all calculated values could be displayed.

Position of surface in external scene:
Marked point:
(112.207 ft, 541.220 ft, 0.100 ft)

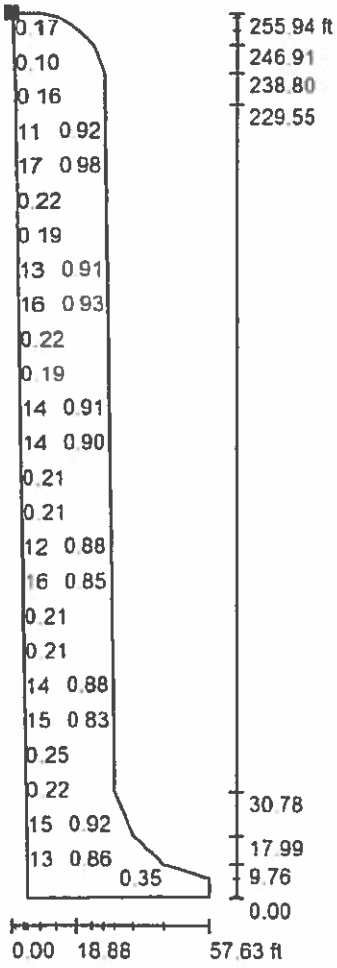


Grid: 128 x 128 Points

E_{av} [fc]	E_{min} [fc]	E_{max} [fc]	u0	E_{min} / E_{max}
3.58	0.09	57	0.025	0.002

Operator
Telephone
Fax
e-Mail

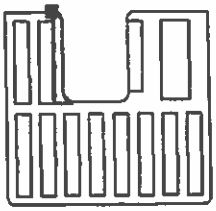
Exterior Scene 1 / Calculation Surface 1 / Value Chart (E, Perpendicular)



Values in Footcandles, Scale 1 : 611

Not all calculated values could be displayed.

Position of surface in external scene:
Marked point:
(112.395 ft, 541.765 ft, 0.100 ft)

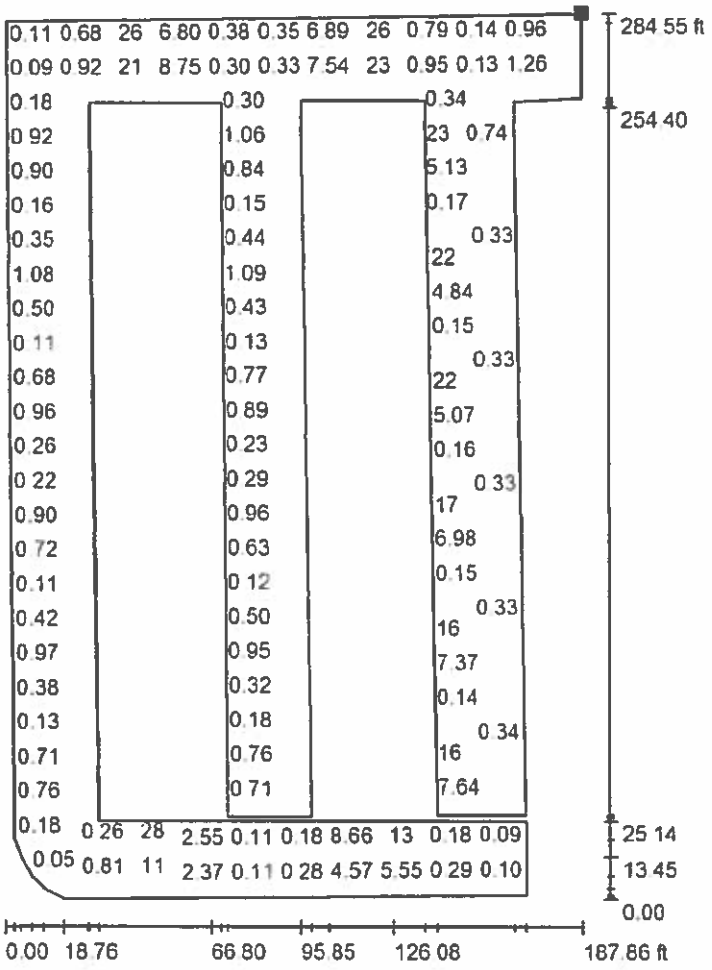


Grid: 128 x 128 Points

E_{av} [fc]	E_{min} [fc]	E_{max} [fc]	u0	E_{min} / E_{max}
3.33	0.04	56	0.011	0.001

Operator
Telephone
Fax
e-Mail

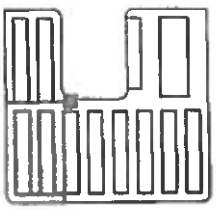
Exterior Scene 1 / Calculation Surface 1 / Value Chart (E, Perpendicular)



Values in Footcandles, Scale 1 : 679

Not all calculated values could be displayed.

Position of surface in external scene:
Marked point:
(169.106 ft, 284.549 ft, 0.100 ft)

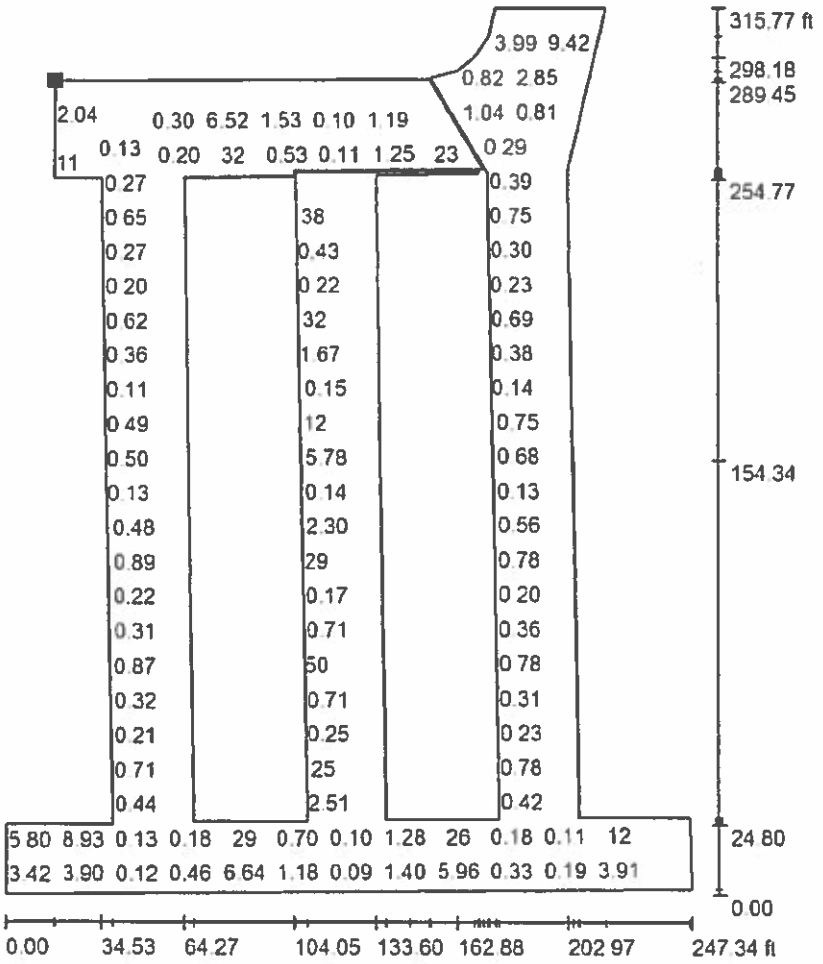


Grid: 128 x 128 Points

E_{av} [fc]	E_{min} [fc]	E_{max} [fc]	u0	E_{min} / E_{max}
4.08	0.04	58	0.009	0.001

Operator
Telephone
Fax
e-Mail

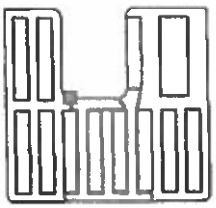
Exterior Scene 1 / Calculation Surface 1 / Value Chart (E, Perpendicular)



Values in Footcandles, Scale 1 : 753

Not all calculated values could be displayed.

Position of surface in external scene:
Marked point:
(170.024 ft, 291.588 ft, 0.100 ft)

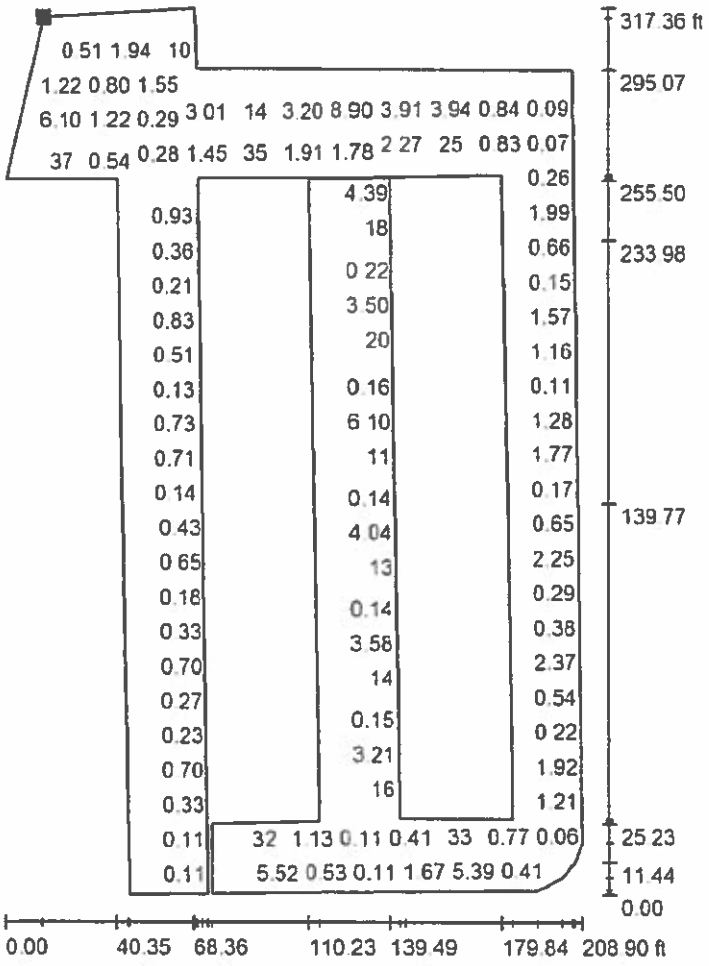


Grid: 128 x 128 Points

E_{av} [fc]	E_{min} [fc]	E_{max} [fc]	u0	E_{min} / E_{max}
3.58	0.08	57	0.023	0.001

Operator
Telephone
Fax
e-Mail

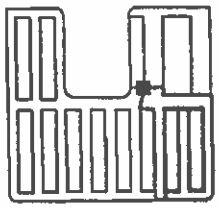
Exterior Scene 1 / Calculation Surface 1 / Value Chart (E, Perpendicular)



Values in Footcandles, Scale 1 : 757

Not all calculated values could be displayed.

Position of surface in external scene:
Marked point:
(368.986 ft, 317.910 ft, 0.100 ft)



Grid: 128 x 128 Points

E_{av} [fc]	E_{min} [fc]	E_{max} [fc]	u0	E_{min} / E_{max}
3.84	0.04	58	0.010	0.001

SITE PLAN FOR PHASE 2 - STORAGE UNITS
MCGUIRK MINI STORAGE, INC.
LINCOLN RD. & E. REMUS RD. (M-20)

B-5 ZONE	
MINIMUM FRONT YARD SETBACK	50 FT (A,B)
MINIMUM SIDE YARD SETBACK	20 FT (B)
MINIMUM REAR YARD SETBACK	25 FT (A,B)
MINIMUM LOT FRONTAGE	100 FT
MINIMUM LOT AREA (SQ FT)	16,000 SQ FT
MAXIMUM BUILDING HEIGHT	35 FT
MAXIMUM LOT COVERAGE (%)	30%

A. OFF-STREET PARKING SHALL BE PERMITTED TO OCCUPY A PORTION OF THE REQUIRED FRONT YARD, PROVIDED THAT THERE SHALL BE MAINTAINED A MINIMUM UNOBSTRUCTED AND LANDSCAPED SETBACK OF TEN (10) FEET BETWEEN THE NEAREST POINT OF THE OFF-STREET PARKING AREAS, EXCLUSIVE OF ACCESS DRIVEWAYS AND THE NEAREST RIGHT-OF-WAY LINE AS INDICATED ON THE MAJOR THOROUGHFARE PLAN.

B. A LOT IN THE B-5 DISTRICT WILL PROVIDE A SIDE AND REAR YARD OF AT LEAST FORTY (40) FEET WHEN ABUTTING A RESIDENTIAL DISTRICT.

MISS DIG:

FOR PROTECTION OF UNDERGROUND UTILITIES, THE CONTRACTOR SHALL CALL "MISS DIG" 1-800-482-7171 A MINIMUM OF 3 WORKING DAYS PRIOR TO ANY EXCAVATION. ALL "MISS DIG" PARTICIPATING MEMBERS WILL BE APPROPRIATELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

UTILITY NOTE:

THE UTILITY LOCATIONS AS HEREON SHOWN ARE BASED ON FIELD OBSERVATIONS AND A CAREFUL REVIEW OF MUNICIPAL AND UTILITY COMPANY RECORDS. HOWEVER, IT IS NOT POSSIBLE TO DETERMINE THE PRECISE LOCATION AND DEPTH OF UNDERGROUND UTILITIES WITHOUT EXCAVATION. THEREFORE, WE CANNOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THE BURIED UTILITY INFORMATION HEREON SHOWN. THE CONTRACTOR SHALL CALL "MISS DIG" (1-800-282-7171) PRIOR TO ANY EXCAVATION. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THESE UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND SHALL MAKE EVERY EFFORT TO PROTECT AND OR RELOCATE THEM AS REQUIRED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER/SURVEYOR AS SOON AS POSSIBLE IN THE EVENT A DISCREPANCY IS FOUND. UNDERGROUND SERVICE LEADS FOR GAS, ELECTRIC, TELEPHONE AND CABLE MAY BE ACROSS PROPERTY, NO INFORMATION AVAILABLE PLEASE CALL MISS DIG.

LEGEND

SYMBOLS

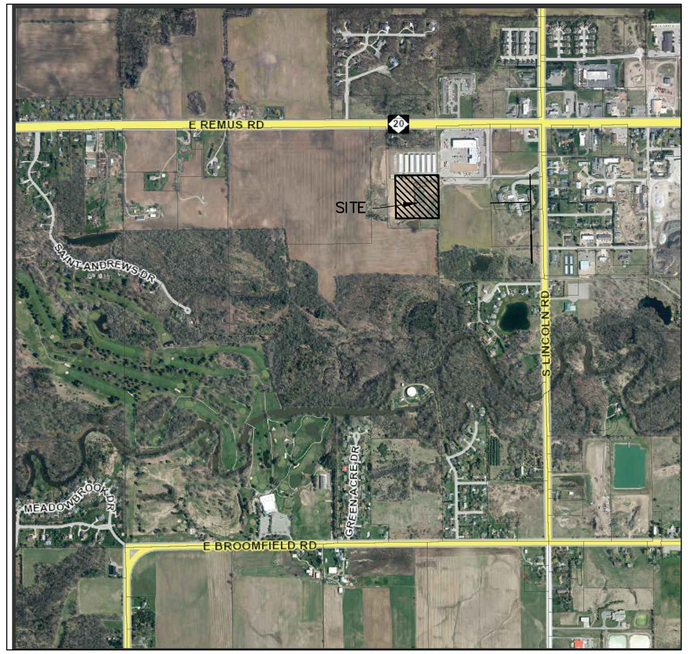
BOLLARD	GAS RISER	SOIL BORING
CATCH BASIN (CURB INLET)	GUY ANCHOR	STORM SEWER MANHOLE
CATCH BASIN (ROUND)	HYDRANT - EXISTING	TELEPHONE RISER
CATCH BASIN (SQUARE)	HYDRANT - PROPOSED	TREE - CONIFEROUS
CLEAN OUT	LIGHT POLE	TREE - DECIDUOUS
DRAINAGE FLOW	MAILBOX	UTILITY POLE
ELECTRICAL BOX	MONITORING WELL	WATER MAIN VALVE
FOUND CONC. MONUMENT	SANITARY SEWER MANHOLE	WATER SHUT-OFF
FOUND IRON	SET IRON	WATER WELL
GAS MAIN VALVE	SIGN	WOOD STAKE

LINETYPES

ELEC.	BURIED ELECTRICAL CABLE
PHONE	BURIED TELEPHONE CABLE
DITCH-CL	CENTERLINE OF DITCH
FM	FORCE MAIN
GAS	GAS MAIN
RD-CL	ROAD CENTERLINE
8" SAN	SANITARY SEWER
12" SS	STORM SEWER
EX-TOS	TOE OF SLOPE
EX-TOB	TOP OF BANK
OHE	UTILITIES - OVERHEAD
UTIL	UTILITIES - UNDERGROUND
12" WM	WATER MAIN

HATCH PATTERNS

	ASPHALT - EXISTING
	ASPHALT - PROPOSED
	CONCRETE
	GRAVEL
	LANDSCAPING
	RIP-RAP



PART OF THE NORTHEAST 1/4, SECTION 20, T14N-R4W,
UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN

LOCATION MAP
NOT TO SCALE

EXISITNG B-5 ZONED PARCEL DESCRIPTION:

A PARCEL OF LAND IN THE NORTHEAST 1/4 OF SECTION 20, T.14 N. - R.04 W., UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN, DESCRIBED AS FOLLOWS: TO FIX THE POINT OF BEGINNING, COMMENCE AT THE NORTHEAST CORNER OF SAID SECTION 20; THENCE S.00°-55'-57"E., ON AND ALONG THE EAST LINE OF SAID SECTION, 700.00 FEET; THENCE S.89°-42'-08"W., PARALLEL WITH THE NORTH LINE OF SAID SECTION, 1327.12 FEET TO A POINT ON THE EAST 1/8 LINE OF SAID SECTION AND THE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE S.00°-39'-12"E., ON AND ALONG SAID EAST 1/8 LINE, 622.35 FEET TO ITS INTERSECTION WITH THE NORTH 1/8 LINE OF SAID SECTION; THENCE S.89°-41'-58"W., ON AND ALONG SAID NORTH 1/8 LINE, 619.03 FEET; THENCE N.00°-55'-47"W., PARALLEL WITH SAID EAST SECTION LINE, 622.41 FEET; THENCE N.89°-42'-08"E., PARALLEL WITH SAID NORTH SECTIO LINE, 622.03 FEET BACK TO THE POINT OF BEGINNING, CONTAINING 8.87 ACRES OF LAND AND SUBJECT TO AND TOGETHER WITH ANY EASMENTS AND/OR RESTRICTIONS OF RECORD.

SHEET INDEX

1	COVER SHEET
2	EXISTING TOPOGRAPHY 60 SCALE
3	EXISTING TOPOGRAPHY 40 SCALE
4	SITE HORIZONTAL & UTILITY PLAN
5	SITE GRADING PLAN
6	SITE SOIL EROSION PLAN
7	CROSS-SECTIONAL VIEW
8	BUILDING ELEVATIONS (BY OTHERS)
9	DIALUX PHOTOMETRIC DESIGN PGS 2-19 (8-1/2" BY 11")

FLOOD ZONE CERTIFICATION:

A PORTION OF SAID DESCRIBED PROPERTY IS LOCATED WITHIN AN AREA HAVING A ZONE DESIGNATION OF A BY THE SECRETARY OF HOUSING AND URBAN DEVELOPMENT, ON FLOOD INSURANCE RATE MAP NO. 26073C0305D WITH AN EFFECTIVE DATE OF FEBRUARY 5, 2014 FOR ISABELLA COUNTY, MICHIGAN COMMUNITY NO. 260812 IN UNION CHARTER TOWNSHIP, ISABELLA COUNTY, STATE OF MICHIGAN WHICH IS THE CURRENT FLOOD INSURANCE RATE MAP FOR THE COMMUNITY IN WHICH SAID PREMISES IS SITUATED.

BENCHMARKS:

BENCHMARK #1: FOUND AN ALUMINUM MICHIGAN DEPARTMENT OF TRANSPORTATION HEIGHT MODERNIZATION MARK DISK SET IN THE TOP OF A 12 INCH DIAMETER CONCRETE POST. LOCATION IS AT THE SOUTH EAST CORNER OF THE LINCOLN ROAD AND REMUS ROAD (M-20) INTERSECTION.
ELEVATION 786.62

BEARING BASIS:
PER GEODETIC OBSERVATION WGS-84 THE BEARING BETWEEN THE NORTHEAST CORNER AND THE NORTH 1/4 CORNER OF SECTION 20, T14N-R4W WAS DETERMINED TO BE S89°-42'-08"W.

SITE: PART OF THE NORTHEAST 1/4 OF SECTION 20, T.14 N. - R.04 W., UNION TOWNSHIP, ISABELLA COUNTY,

CLIENT:
MCGUIRK MINI STRORAGE
3046 JENS WAY
MT. PLEASANT, MI 48858
CONTACT: CHUCK MCGUIRK
PHONE: (989) 772-1309

CONSULTANT:
CENTRAL MICHIGAN SURVEYING & DEVELOPMENT CO., INC.
2257 EAST BROOMFIELD ROAD
MT. PLEASANT, MI 48858
CONTACT PERSON: TIMOTHY E BEBEE
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

CHARTER COMMUNICATIONS
915 E. BROOMFIELD ROAD
MT. PLEASANT, MI 48858
(989) 621-4932
RANDY BUNKER
rbunker@chartercom.com

CONSUMERS ENERGY
1325 WRIGHT AVENUE
ALMA, MI 48801
(989) 466-4282
KIM STUDT
kimberly.studt@cmsenergy.com

FRONTIER
345 PINE STREET
ALMA, MI 48801
(989) 463-0392
MARK A. MARSHALL
Mark.Marshall@ftr.com

DTE ENERGY
4420 44TH ST., S.E., SUITE B
KENTWOOD, MI 49512
(616) 954-4623
MARY JO MCKERSIE
mckersiem@dteenergy.com

MT. PLEASANT FIRE DEPARTMENT
804 EAST HIGH STREET
MT. PLEASANT, MI 48858
(989) 779-5100 EXT 5122
LT. RANDY KEELER
rkeeler@mt-pleasant.org

CHARTER TOWNSHIP OF UNION
PUBLIC WATER/PUBLIC SEWER
2010 N. LINCOLN ROAD
MT. PLEASANT, MI 48858
(989) 772-4600 EXT 24
KIM SMITH
ksmith@uniontownshipmi.com

CHARTER TOWNSHIP OF UNION
PLANNING & ZONING
2010 NORTH LINCOLN ROAD
MT. PLEASANT, MI 48858
(989) 772-4600 EXT 241
PETER GALLINAT
pgallinat@uniontownshipmi.com

DRAIN COMMISSIONERS OFFICE
ISABELLA COUNTY BUILDING
200 NORTH MAIN STREET ROOM 140
MT. PLEASANT, MI 48857
(989) 772-0911
ROBERT WILLOUGHBY
drain@isabellacounty.org

ISABELLA COUNTY ROAD COMMISSION
2261 EAST REMUS ROAD
MT. PLEASANT, MI 48858
(989) 773-7131 EXT 115
PATRICK GAFFNEY
PGaffney@isabellaroads.com

CMS & D
SURVEYING / ENGINEERING
2257 E. BROOMFIELD RD.
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

COVER SHEET
MCGUIRK MINI STORAGE INC.
PART OF THE NORTHEAST 1/4
SECTION 20, T14N-R4W
UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN

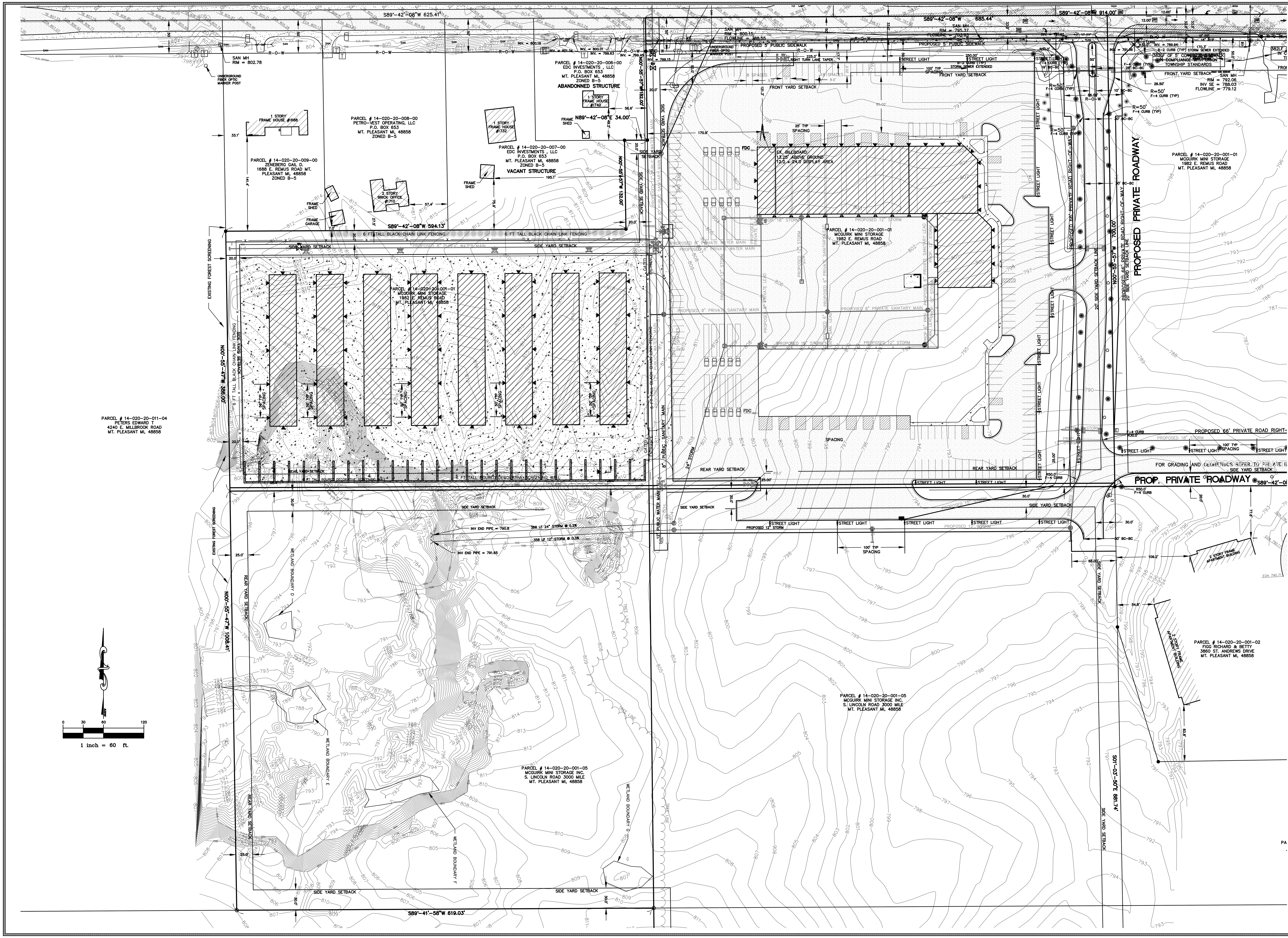
REVISIONS: REVISIONS PER ZONING REPORT 3-16-21

SUBMITTALS: SUBMITTAL TO TOWNSHIP 2-23-21
SUBMITTAL TO TOWNSHIP PLANNING 4-23-21

JOB NUMBER: 2101-009
DRAWN BY: TELB
DESIGNED BY: N/A
CHECKED BY: TELB

SCALE: N/A
SHEET NUMBER: 1 OF 9

036



EXISTING TOPOGRAPHY 60 SCALE
MCGUIRK MINI STORAGE INC.
PART OF THE NORTHEAST 1/4
SECTION 20, T14N-R4W
UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN

CMS & D
SURVEYING / ENGINEERING
2257 E. BROOMFIELD RD.
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

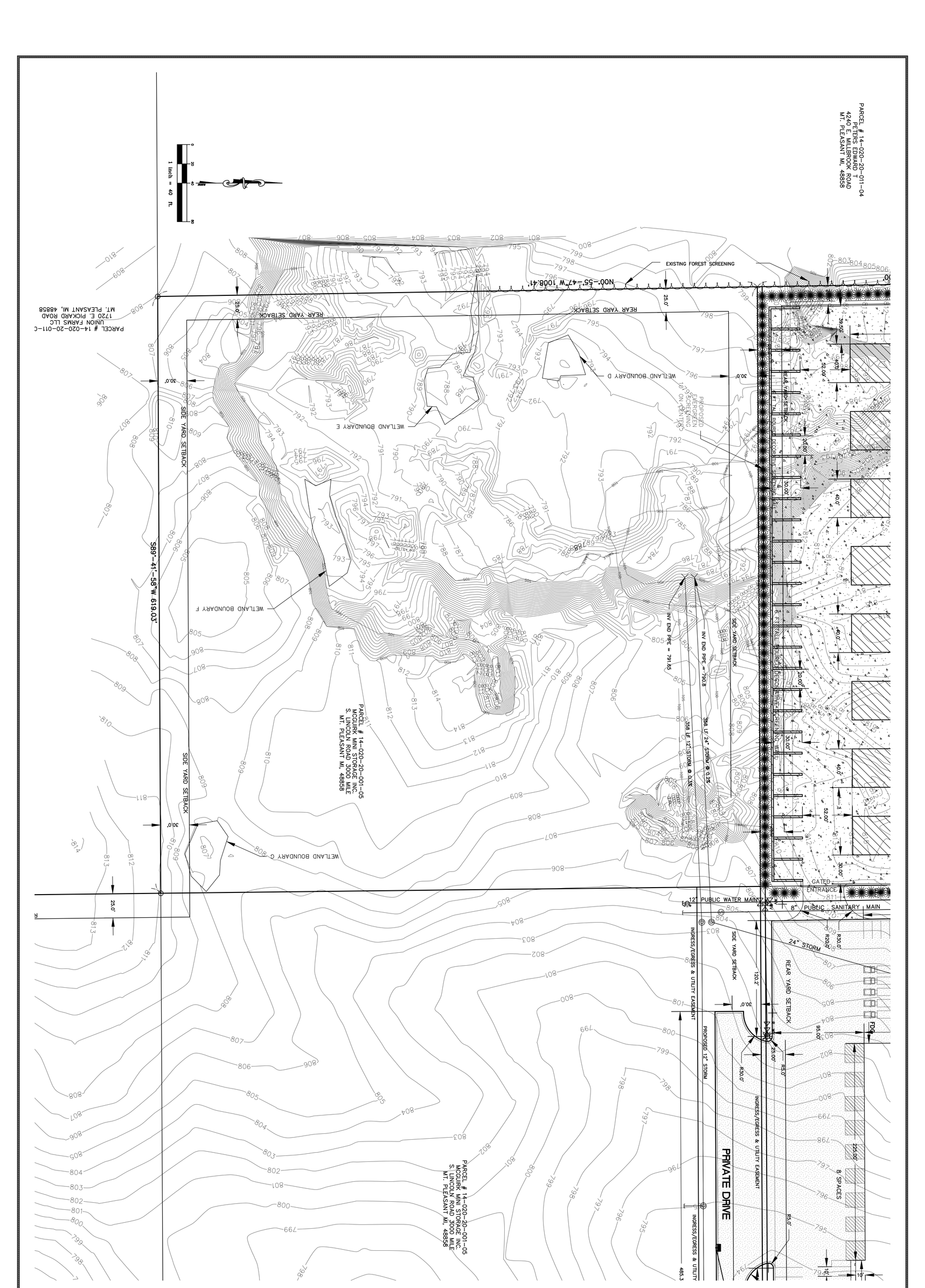
REVISIONS:
REVISIONS PER ZONING REPORT 3-16-21

SUBMITTALS:
SUBMITTAL TO TOWNSHIP 2-23-21
SUBMITTAL TO TOWNSHIP PLANNING 4-23-21

JOB NUMBER: 2101-009
DRAWN BY: TELB
DESIGNED BY: N/A
CHECKED BY: TELB

SCALE 1" = 60'
SHEET NUMBER 2 OF 9

037



SCALE	JOB NUMBER:	SUBMITTALS:	REVISIONS:
1" = 40'	2101-009	SUBMITTAL TO TOWNSHIP 2-23-21	REVISIONS PER ZONING REPORT 3-16-21
	DRAWN BY: TELB	SUBMITTAL TO TOWNSHIP PLANNING 4-23-21	
SHEET NUMBER	DESIGNED BY: N/A		
3 OF 9	CHECKED BY: TELB		

EXISTING TOPOGRAPHY 40 SACLE

MCGUIRK MINI STORAGE INC.

PART OF THE NORTHEAST 1/4
SECTION 20, T14N-R4W
UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN

CMS & D
SURVEYING / ENGINEERING
2257 E. BROOMFIELD RD.
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

PARCEL # 14-020-20-011-00
UNION FARMS LLC
1720 E. PICKARD ROAD
MT. PLEASANT MI, 48858
ZONED B-5

PROJECT LIGHT

THE PROPOSED PHASE 2 SELF-STORAGE STRUCTURES WILL BE LIT IN THE SAME MANNER AS PHASE 1. THE LIGHTS THAT HAVE BEEN INSTALLED IN PHASE 1 ARE IN ACCORDANCE WITH UNION TOWNSHIP'S LIGHTING ORDINANCE AND WILL CONFORM TO THE NEWLY ADOPTED ORDINANCE (SECTION 8.2). CUT SHEETS FOR THE PROPOSED LIGHTING HAVE BEEN INCLUDED IN THE SUBMITTAL PACKAGE.

PROJECT LANDSCAPING

THE PROPOSED PHASE 2 PROJECT HAS BEEN REVISED FROM IT'S PREVIOUSLY SUBMITTED AND APPROVED SITE PLAN AS IT RELATES TO LANDSCAPING/SCREENING TO COMPLY WITH THE UNION TOWNSHIP ORDINANCE ADOPTED IN SPETEMBER 2020.

- SECTION 10.2A GENERAL LANDSCAPING REQUIREMENTS.
  * ALL UNPAVED PORTIONS OF THE SITE WILL BE PLANTED WITH GRASS. HYDROSEEDING WILL BE UTILIZED TO ESTABLISH THESE AREAS.

- SECTION 10.2E SCREENING.
  * EVERGREEN PLANTINGS AT 15 FOOT SPACING ALONG THE EAST, WEST AND SOUTH PROPERTY LINES HAVE BEEN SHOWN ON THE DRAWING. THE EVERGREENS WILL BE PLANTED AT TEH TOP OF A 2.5' TALL BERM AS IS SHOWN IN THE DETAIL ON THIS DRAWING SHEET. EVERGREENS OF 4-5 FEET WILL BE PLANTED AND THUS GIVING A TOTAL INITIAL SCREENING HEIGHT OF 6.5 TO 7.5 FEET, WITH THE REQUIRED 8 FOOT HEIGHT BEING REACHED WITHIN 3 YEARS. DUE TO THE SITE MASS SITE GRADING THAT WILL BE REQUIRED, PORTIONS OF THE BERM AND TREE PLANTING MAY NOT BE POSSIBLE UNTIL THE GRADING HAS BEEN COMPLETED.

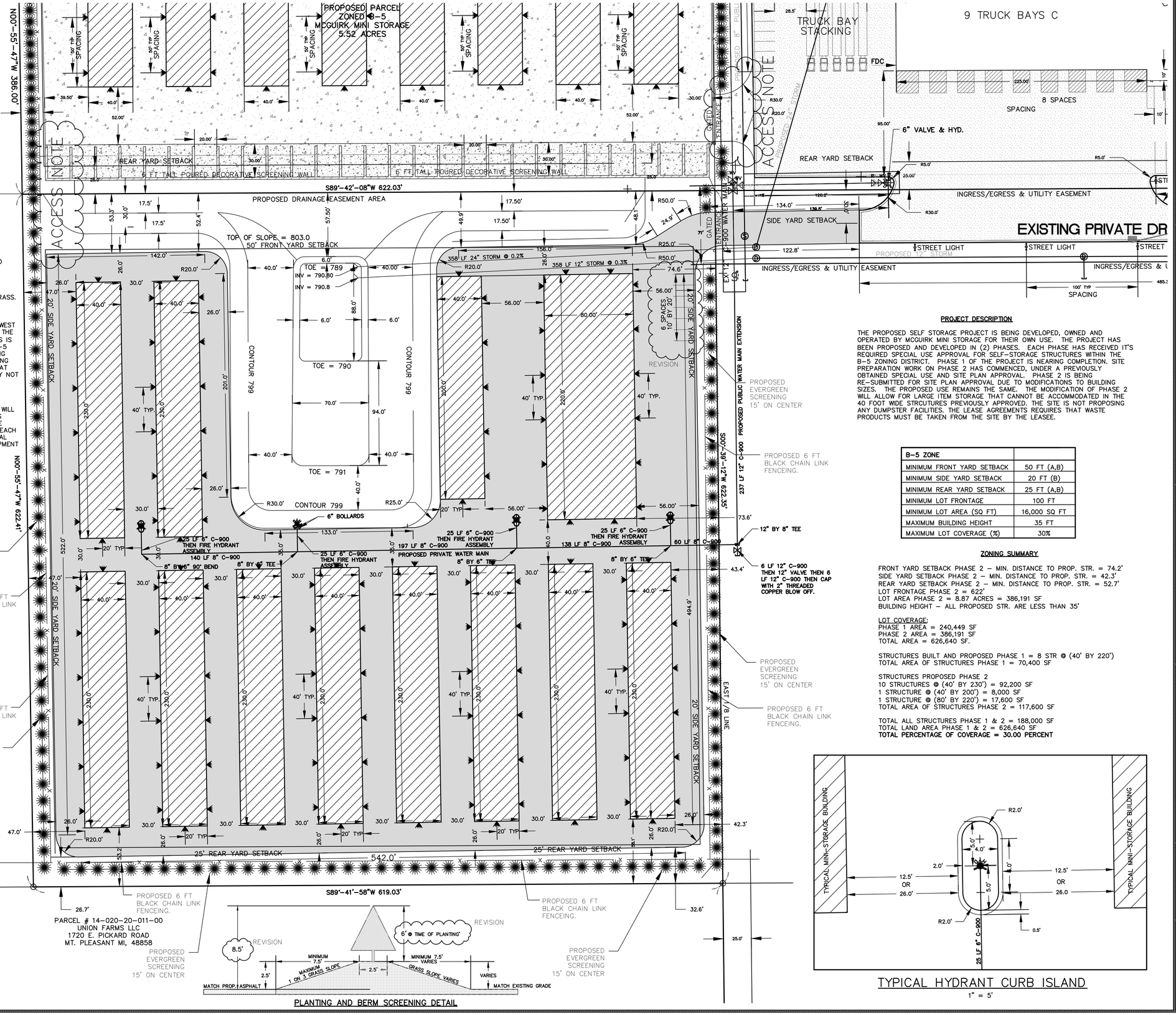
- LANDSCAPING MAINTENANCE PLAN.
  * LANDSCAPING WILL HAVE A ONE YEAR GUARANTEE FROM THE INSTALLER. PRIOR TO THE ONE YEAR ANNIVERSARY, THE INSTALLER WILL REPLACE ANY DAMAGE, DYING OR DEAD PLANTINGS. FOLLOWING THIS GUARANTEE PERIOD, EACH SPRING, THE SCREENING PLANTING WILL BE INSPECTED AND ANY DAMAGED, DYING OR DEAD PLANTINGS. DURING EACH SPRING REQUIRED PLANTING WILL BE REPLACED, AS NEEDED. GENERAL LAWN AREA WILL BE MAINTAINED AS PARK TO THE OVERALL DEVELOPMENT LANDSCAPING CONTRACT.

PROJECT UTILITIES

THE PROPOSED PHASE 2 SELF-STORAGE STRUCTURES WILL BE SERVICED WITH ELECTRICITY FOR SITE LIGHTING. A PRIVATE 8" WATER MAIN FIRE PROTECTION LINE WILL BE INSTALLED. NO BUILDING SERVICES WILL BE TAKEN OFF FROM THIS PROPOSED LINE. THE PRIVATE FIRE LINE WILL REQUIRE AN EXTENSION OF THE EXISTING 12" PUBLIC WATER MAIN AS SHOWN. NATURAL GAS MAY BE RUN TO THE LARGER STORAGE STRUCTURE FOR HEATING PURPOSES. THE OWNER/DEVELOPER IS CURRENTLY WORKING WITH DTE TO DETERMINE IF THIS IS FEASIBLE.

ACCESS NOTE

PHASE 2 HAS BEEN APPROVED BY THE CITY OF MT.PLEASANT FIRE DEPARTMENT FOR ACCESS. IN THE FUTURE THE EXISTING ACCESS DRIVE AT THE SOUTHEAST CORNER OF PHASE 1 WILL BE REMOVED AT SUCH TIME THAT THE PHASE 2 PROJECT HAS CONNECTED THE WESTERLY ACCESS FROM PHASE 2 TO PHASE 1. THE REMOVAL OF THE EXISTING ACCESS TO PHASE 1 AND THE INSTALLATION OF THE CONNECTION BETWEEN PHASE 1 AND 2 HAS BEEN REVIEWED BY THE CITY OF MT. PLEASANT FIRE DEPARTMENT AND HAS ALSO BEEN APPROVED.



PLANTING AND BERM SCREENING DETAIL

TYPICAL HYDRANT CURB ISLAND
1" = 5'

PROJECT DESCRIPTION

THE PROPOSED SELF STORAGE PROJECT IS BEING DEVELOPED, OWNED AND OPERATED BY MCGUIRK MINI STORAGE FOR THEIR OWN USE. THE PROJECT HAS BEEN PROPOSED AND DEVELOPED IN (2) PHASES. EACH PHASE HAS RECEIVED IT'S REQUIRED SPECIAL USE APPROVAL FOR SELF-STORAGE STRUCTURES WITHIN THE B-5 ZONING DISTRICT. PHASE 1 OF THE PROJECT IS NEARING COMPLETION. SITE PREPARATION WORK ON PHASE 2 HAS COMMENCED, UNDER A PREVIOUSLY OBTAINED SPECIAL USE AND SITE PLAN APPROVAL. PHASE 2 IS BEING RE-SUBMITTED FOR SITE PLAN APPROVAL DUE TO MODIFICATIONS TO BUILDING SIZES. THE PROPOSED USE REMAINS THE SAME. THE MODIFICATION OF PHASE 2 WILL ALLOW FOR LARGE ITEM STORAGE THAT CANNOT BE ACCOMMODATED IN THE 40 FOOT WIDE STRCUTURES PREVIOUSLY APPROVED. THE SITE IS NOT PROPOSING ANY DUMPSTER FACILITIES. THE LEASE AGREEMENTS REQUIRES THAT WASTE PRODUCTS MUST BE TAKEN FROM THE SITE BY THE LEASEE.

B-5 ZONE	
MINIMUM FRONT YARD SETBACK	50 FT (A,B)
MINIMUM SIDE YARD SETBACK	20 FT (B)
MINIMUM REAR YARD SETBACK	25 FT (A,B)
MINIMUM LOT FRONTAGE	100 FT
MINIMUM LOT AREA (SQ FT)	16,000 SQ FT
MAXIMUM BUILDING HEIGHT	35 FT
MAXIMUM LOT COVERAGE (%)	30%

ZONING SUMMARY

FRONT YARD SETBACK PHASE 2 – MIN. DISTANCE TO PROP. STR. = 74.2'
SIDE YARD SETBACK PHASE 2 – MIN. DISTANCE TO PROP. STR. = 42.3'
REAR YARD SETBACK PHASE 2 – MIN. DISTANCE TO PROP. STR. = 52.7'
LOT FRONTAGE PHASE 2 = 622'
LOT AREA PHASE 2 = 8.87 ACRES = 386,191 SF
BUILDING HEIGHT – ALL PROPOSED STR. ARE LESS THAN 35'

LOT COVERAGE:
PHASE 1 AREA = 240,449 SF
PHASE 2 AREA = 386,191 SF
TOTAL AREA = 626,640 SF.

STRUCTURES BUILT AND PROPOSED PHASE 1 = 8 STR @ (40' BY 220')
TOTAL AREA OF STRUCTURES PHASE 1 = 70,400 SF

STRUCTURES PROPOSED PHASE 2
10 STRUCTURES @ (40' BY 230') = 92,200 SF
1 STRUCTURE @ (40' BY 200') = 8,000 SF
1 STRUCTURE @ (80' BY 220') = 17,600 SF
TOTAL AREA OF STRUCTURES PHASE 2 = 117,600 SF

TOTAL ALL STRUCTURES PHASE 1 & 2 = 188,000 SF
TOTAL LAND AREA PHASE 1 & 2 = 626,640 SF
TOTAL PERCENTAGE OF COVERAGE = 30.00 PERCENT

CMS & D
SURVEYING / ENGINEERING
2257 E. BROOMFIELD RD.
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

SITE HORIZONTAL & UTILITY PLAN

MCGUIRK MINI STORAGE INC.
PART OF THE NORTHEAST 1/4
SECTION 20, T14N-R4W
UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN

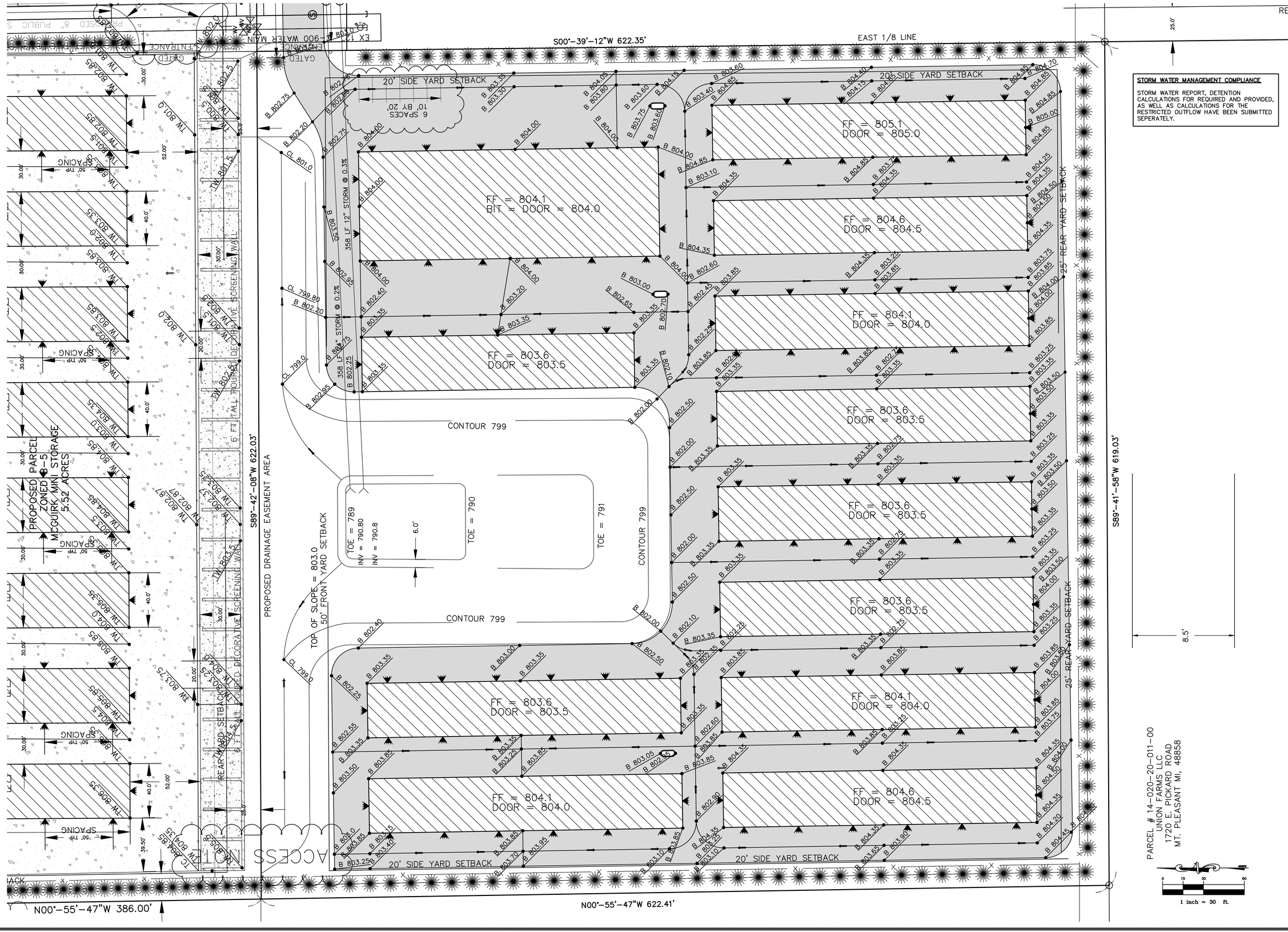
REVISIONS: REVISIONS PER ZONING REPORT 3-16-21

SUBMITTALS: SUBMITTAL TO TOWNSHIP 2-23-21
SUBMITTAL TO TOWNSHIP PLANNING 4-23-21

JOB NUMBER: 2101-009
DRAWN BY: TELB
DESIGNED BY: TELB
CHECKED BY: TELB

SCALE 1" = 40'

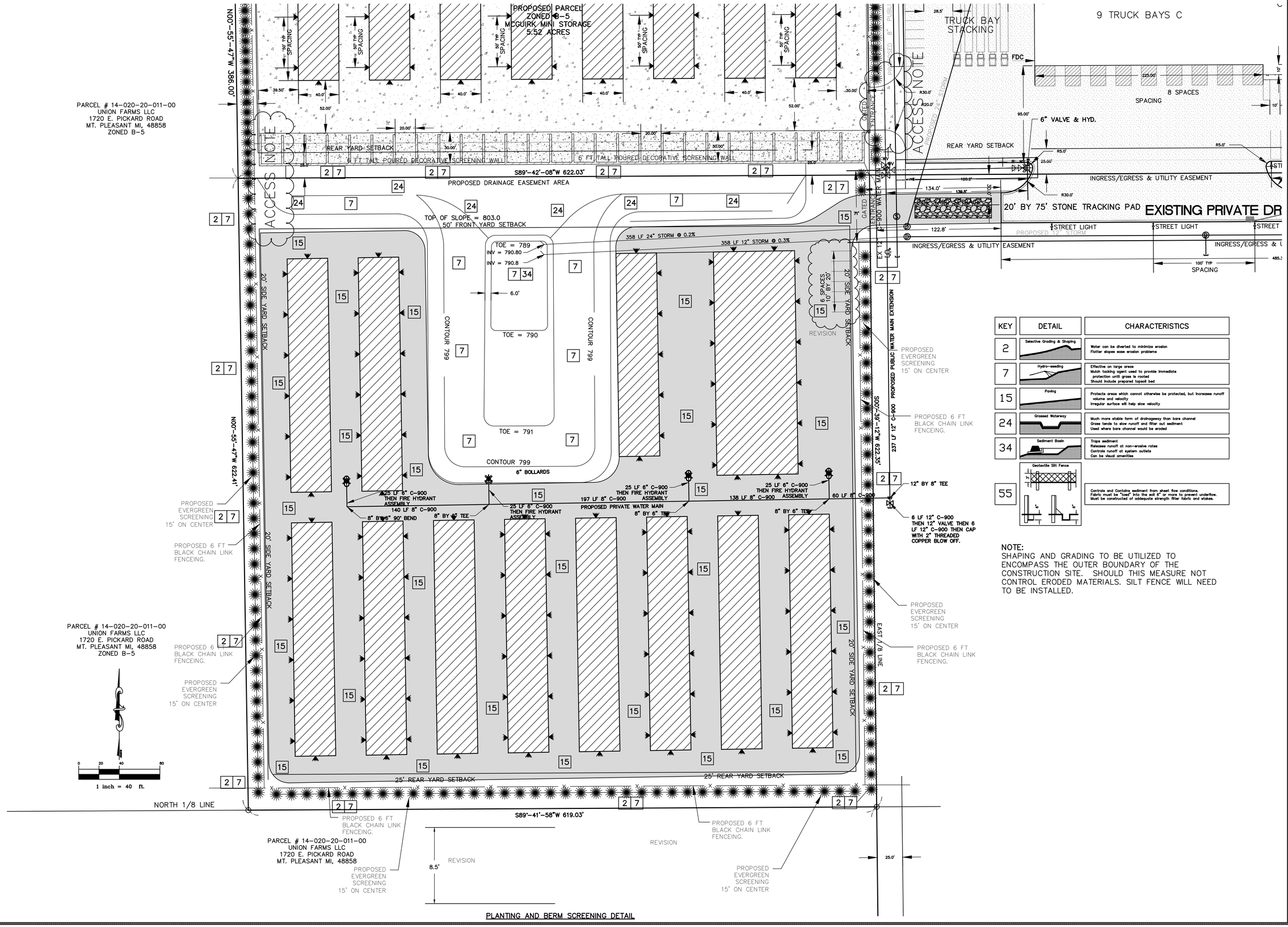
SHEET NUMBER 4 OF 9



CMS & D
SURVEYING / ENGINEERING
2257 E. BROOMFIELD RD.
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

GRADING PLAN
MCGUIRK MINI STORAGE INC.
PART OF THE NORTHEAST 1/4
SECTION 20, T14N-R4W
UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN

REVISIONS:	SUBMITTALS:	JOB NUMBER:	SCALE
REVISIONS PER ZONING REPORT 3-16-21	SUBMITTAL TO TOWNSHIP 2-23-21	2101-009	1" = 30'
	SUBMITTAL TO TOWNSHIP PLANNING 4-23-21	DRAWN BY: TELB	
		DESIGNED BY: TELB	SHEET NUMBER 5 OF 9
		CHECKED BY: TELB	



KEY	DETAIL	CHARACTERISTICS
2	Selective Grading & Shaping	Water can be diverted to minimize erosion Flatter slopes ease erosion problems
7	Hydro-seeding	Effective on large areas Mulch tacking agent used to provide immediate protection until grass is rooted Should include prepared topsoil bed
15	Paving	Protects areas which cannot otherwise be protected, but increases runoff volume and velocity Irregular surface will help slow velocity
24	Grassed Waterway	Much more stable form of drainageway than bare channel Grass tends to slow runoff and filter out sediment Used where bare channel would be eroded
34	Sediment Basin	Traps sediment Releases runoff at non-erosive rates Controls runoff at system outlets Can be visual amenities
55	Geotextile Silt Fence	Controls and Contains sediment from sheet flow conditions. Fabric must be "load" into the soil 8" or more to prevent underflow. Must be constructed of adequate strength filter fabric and stakes.

NOTE:
SHAPING AND GRADING TO BE UTILIZED TO ENCOMPASS THE OUTER BOUNDARY OF THE CONSTRUCTION SITE. SHOULD THIS MEASURE NOT CONTROL ERODED MATERIALS. SILT FENCE WILL NEED TO BE INSTALLED.

CMS & D
SURVEYING / ENGINEERING
2257 E. BROOMFIELD RD.
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

SOIL EROSION & SEDIMENTATION PLAN

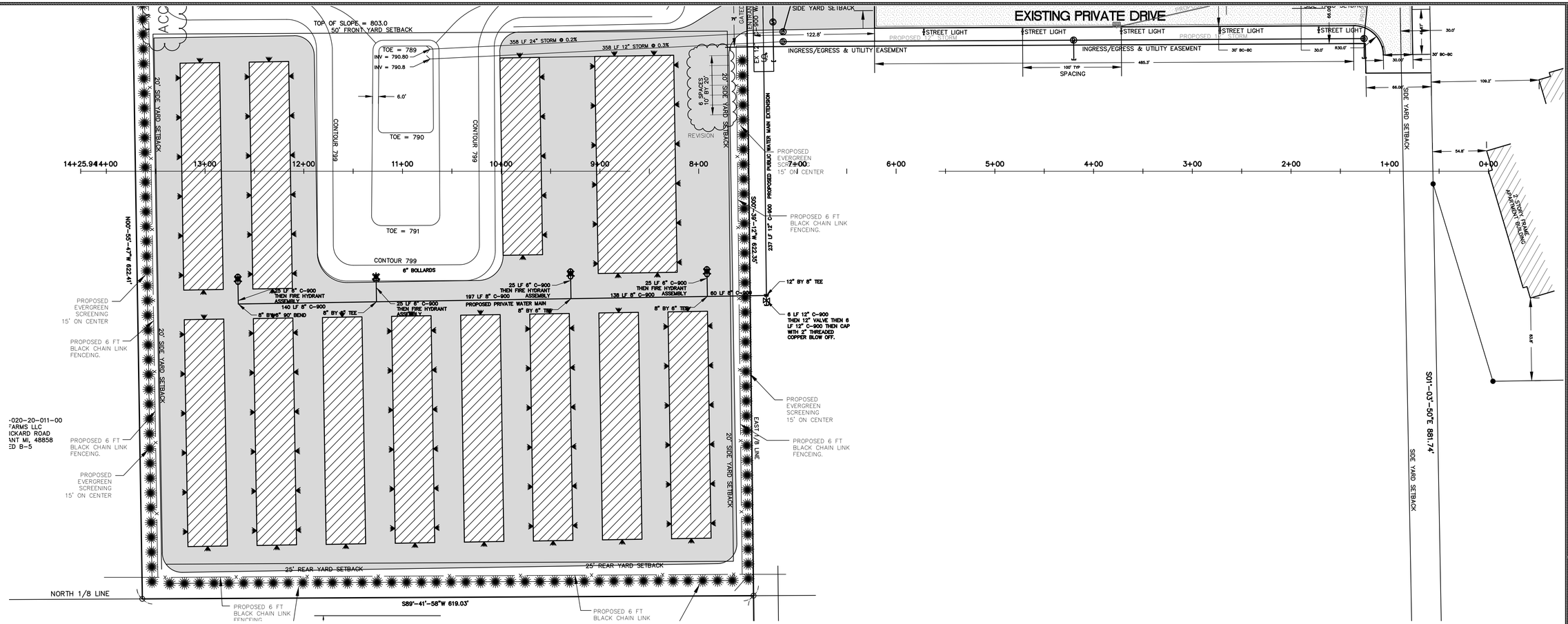
MCGUIRK MINI STORAGE INC.
PART OF THE NORTHEAST 1/4
SECTION 20, T14N-R4W
UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN

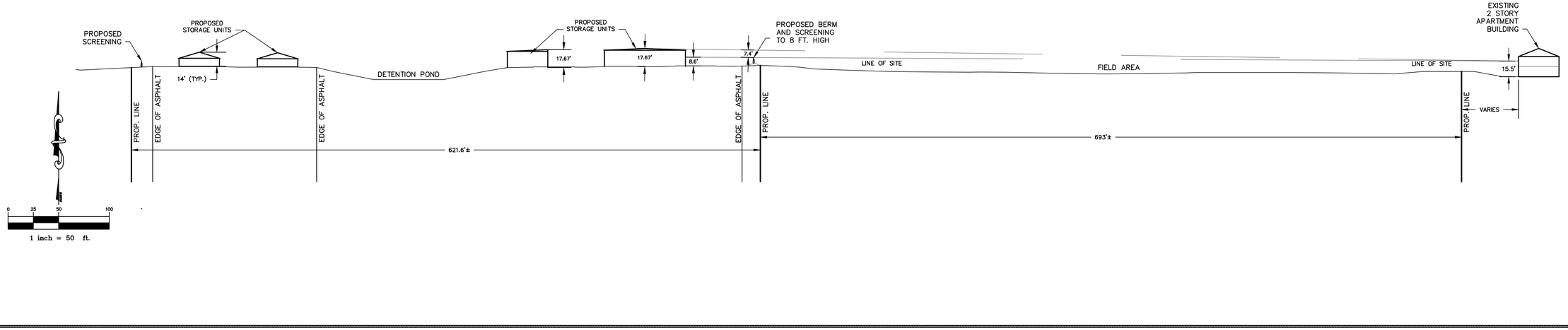
REVISIONS: REVISIONS PER ZONING REPORT 3-16-21

SUBMITTALS: SUBMITTAL TO TOWNSHIP 2-23-21
SUBMITTAL TO TOWNSHIP PLANNING 4-23-21

JOB NUMBER: 2101-009
DRAWN BY: TELB
DESIGNED BY: TELB
CHECKED BY: TELB

SCALE 1" = 40'
SHEET NUMBER 6 OF 9





CMS & D

SURVEYING / ENGINEERING

2257 E. BROOMFIELD RD.
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-0752
EMAIL: info@cms-d.com

CROSS-SECTIONAL VIEW

MCGUIRK MINI STORAGE INC.

PART OF THE NORTHEAST 1/4
SECTION 20, T14N-R4W
UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN

REVISIONS:
REVISIONS PER ZONING REPORT 3-16-21

SUBMITTALS:
SUBMITTAL TO TOWNSHIP 2-23-21
SUBMITTAL TO TOWNSHIP PLANNING 4-23-21

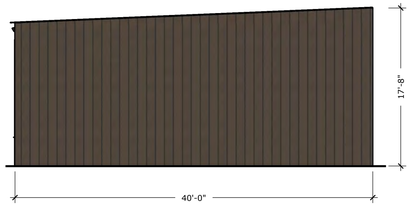
JOB NUMBER: 2101-009
DRAWN BY: TELB
DESIGNED BY: TELB
CHECKED BY: TELB

SCALE 1" = 50'

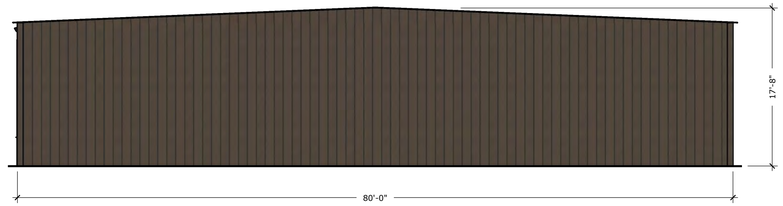
SHEET NUMBER 7 OF 9



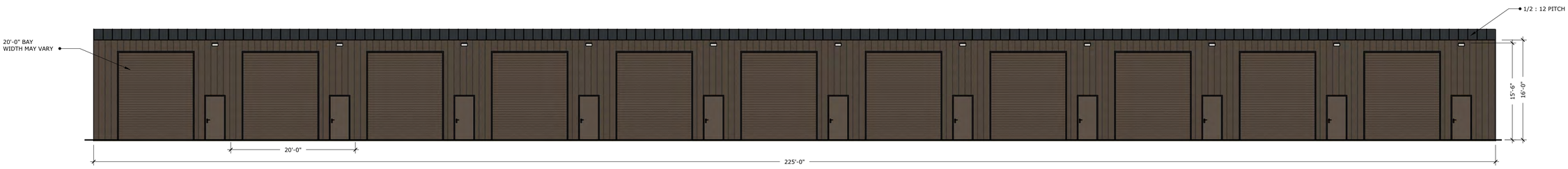




SCHEMATIC EXTERIOR SIDE ELEVATION
SCALE: 1/8" = 1'-0"



SCHEMATIC EXTERIOR SIDE ELEVATION
SCALE: 1/8" = 1'-0"



SCHEMATIC EXTERIOR FRONT ELEVATION
SCALE: 1/8" = 1'-0"

McGuirk SAND - GRAVEL
3046 Jen's Way - Mount Pleasant, MI 48858
989-772-1309
PROOF
Drawings and documents are schematic and are not suitable for construction.

McGuirk Sand - Gravel
Mini Storage

Project 1

Partner for Contact:
Order No.:
Company:
Customer No.:

Date: 04 / 15 / 2021
Operator:

Operator
Telephone
Fax
e-Mail

Table of contents

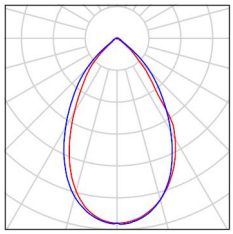
Project 1
Project Cover 1
Table of contents 2
Luminaire parts list 3
RWP02-80W
Luminaire Data Sheet 4
RWP02-40W
Luminaire Data Sheet 5
Exterior Scene 1
Luminaires (coordinates list) 6
3D Rendering 10
False Color Rendering 11
Exterior Surfaces
field
Surface 1
Isolines (E) 12
Value Chart (E) 13
Calculation Surface 1
Value Chart (E, Perpendicular) 14
Calculation Surface 1
Value Chart (E, Perpendicular) 15
Calculation Surface 1
Value Chart (E, Perpendicular) 16
Calculation Surface 1
Value Chart (E, Perpendicular) 17
Calculation Surface 1
Value Chart (E, Perpendicular) 18
Calculation Surface 1
Value Chart (E, Perpendicular) 19

Operator
Telephone
Fax
e-Mail

Project 1 / Luminaire parts list

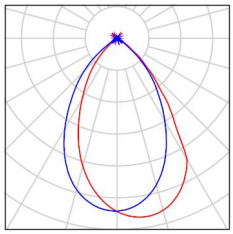
89 Pieces RWP02-40W
Article No.:
Luminous flux (Luminaire): 4904 lm
Luminous flux (Lamps): 4904 lm
Luminaire Wattage: 39.1 W
Luminaire classification according to CIE: 100
CIE flux code: 82 98 100 100 100
Fitting: 1 x User defined (Correction Factor 1.000).

See our luminaire catalog for an image of the luminaire.



26 Pieces RWP02-80W
Article No.:
Luminous flux (Luminaire): 10059 lm
Luminous flux (Lamps): 10061 lm
Luminaire Wattage: 79.2 W
Luminaire classification according to CIE: 100
CIE flux code: 80 97 100 100 100
Fitting: 1 x User defined (Correction Factor 1.000).

See our luminaire catalog for an image of the luminaire.

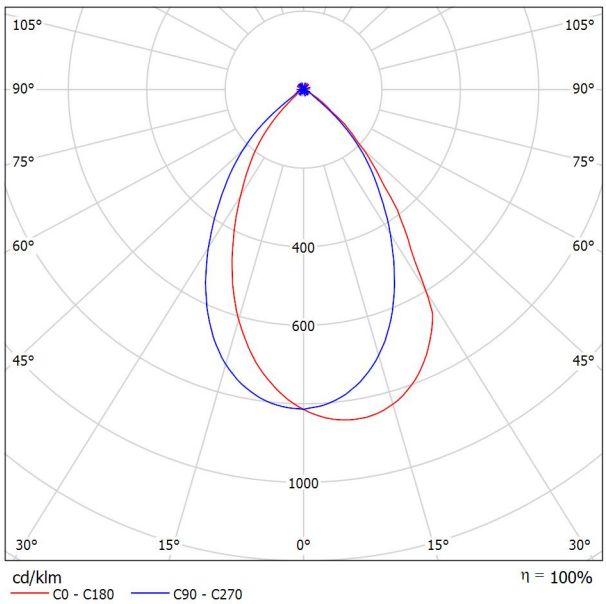


Operator
Telephone
Fax
e-Mail

RWP02-80W / Luminaire Data Sheet

See our luminaire catalog for an image of the luminaire.

Luminous emittance 1:



Luminaire classification according to CIE: 100
CIE flux code: 80 97 100 100 100

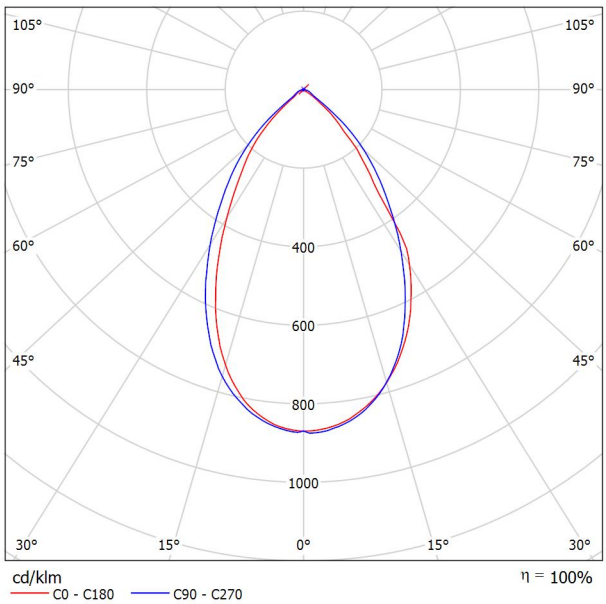
Due to missing symmetry properties, no UGR table can be displayed for this luminaire.

Operator
Telephone
Fax
e-Mail

RWP02-40W / Luminaire Data Sheet

See our luminaire catalog for an image of the luminaire.

Luminous emittance 1:



Luminaire classification according to CIE: 100
CIE flux code: 82 98 100 100 100

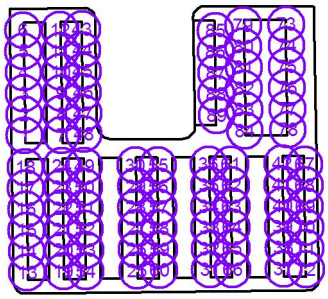
Due to missing symmetry properties, no UGR table can be displayed for this luminaire.

Operator
Telephone
Fax
e-Mail

Exterior Scene 1 / Luminaires (coordinates list)

RWP02-40W

4904 lm, 39.1 W, 1 x 1 x User defined (Correction Factor 1.000).



No.	Position [ft]			Rotation [°]		
	X	Y	Z	X	Y	Z
1	5.405	299.034	7.200	0.0	-30.0	-179.1
2	4.789	339.020	7.200	0.0	-30.0	-179.1
3	4.173	379.005	7.200	0.0	-30.0	-179.1
4	3.556	418.991	7.200	0.0	-30.0	-179.1
5	2.940	458.976	7.200	0.0	-30.0	-179.1
6	2.324	498.962	7.200	0.0	-30.0	-179.1
7	75.618	299.633	7.200	0.0	-30.0	-179.1
8	75.001	339.618	7.200	0.0	-30.0	-179.1
9	74.385	379.604	7.200	0.0	-30.0	-179.1
10	73.769	419.589	7.200	0.0	-30.0	-179.1
11	73.153	459.575	7.200	0.0	-30.0	-179.1
12	72.537	499.560	7.200	0.0	-30.0	-179.1
13	10.399	39.142	7.200	0.0	-30.0	-179.1
14	9.782	79.128	7.200	0.0	-30.0	-179.1
15	9.166	119.113	7.200	0.0	-30.0	-179.1
16	8.550	159.099	7.200	0.0	-30.0	-179.1
17	7.934	199.084	7.200	0.0	-30.0	-179.1
18	7.318	239.070	7.200	0.0	-30.0	-179.1
19	79.446	41.105	7.200	0.0	-30.0	-179.1
20	78.830	81.091	7.200	0.0	-30.0	-179.1
21	78.214	121.076	7.200	0.0	-30.0	-179.1
22	77.598	161.062	7.200	0.0	-30.0	-179.1
23	76.982	201.047	7.200	0.0	-30.0	-179.1
24	76.365	241.033	7.200	0.0	-30.0	-179.1
25	219.143	42.811	7.200	0.0	-30.0	-179.1
26	218.526	82.797	7.200	0.0	-30.0	-179.1
27	217.910	122.782	7.200	0.0	-30.0	-179.1
28	217.294	162.768	7.200	0.0	-30.0	-179.1

Operator
Telephone
Fax
e-Mail

Exterior Scene 1 / Luminaires (coordinates list)

No.	Position [ft]			Rotation [°]		
	X	Y	Z	X	Y	Z
29	216.678	202.753	7.200	0.0	-30.0	-179.1
30	216.062	242.739	7.200	0.0	-30.0	-179.1
31	357.858	44.472	7.200	0.0	-30.0	-179.1
32	357.242	84.457	7.200	0.0	-30.0	-179.1
33	356.625	124.443	7.200	0.0	-30.0	-179.1
34	356.009	164.429	7.200	0.0	-30.0	-179.1
35	355.393	204.414	7.200	0.0	-30.0	-179.1
36	354.777	244.400	7.200	0.0	-30.0	-179.1
37	497.538	45.998	7.200	0.0	-30.0	-179.1
38	496.922	85.983	7.200	0.0	-30.0	-179.1
39	496.306	125.969	7.200	0.0	-30.0	-179.1
40	495.690	165.954	7.200	0.0	-30.0	-179.1
41	495.074	205.940	7.200	0.0	-30.0	-179.1
42	494.458	245.925	7.200	0.0	-30.0	-179.1
43	114.825	500.957	7.200	0.0	-30.0	0.9
44	115.437	461.093	7.200	0.0	-30.0	0.9
45	116.049	421.230	7.200	0.0	-30.0	0.9
46	116.661	381.366	7.200	0.0	-30.0	0.9
47	117.273	341.503	7.200	0.0	-30.0	0.9
48	117.885	301.639	7.200	0.0	-30.0	0.9
49	118.849	241.085	7.200	0.0	-30.0	0.9
50	119.461	201.222	7.200	0.0	-30.0	0.9
51	120.073	161.358	7.200	0.0	-30.0	0.9
52	120.685	121.495	7.200	0.0	-30.0	0.9
53	121.296	81.631	7.200	0.0	-30.0	0.9
54	121.908	41.768	7.200	0.0	-30.0	0.9
55	258.834	242.660	7.200	0.0	-30.0	0.9
56	259.446	202.797	7.200	0.0	-30.0	0.9
57	260.058	162.933	7.200	0.0	-30.0	0.9
58	260.670	123.070	7.200	0.0	-30.0	0.9
59	261.282	83.206	7.200	0.0	-30.0	0.9
60	261.894	43.343	7.200	0.0	-30.0	0.9
61	397.280	244.452	7.200	0.0	-30.0	0.9
62	397.892	204.589	7.200	0.0	-30.0	0.9
63	398.504	164.725	7.200	0.0	-30.0	0.9
64	399.116	124.862	7.200	0.0	-30.0	0.9
65	399.728	84.998	7.200	0.0	-30.0	0.9
66	400.340	45.135	7.200	0.0	-30.0	0.9

Operator
Telephone
Fax
e-Mail

Exterior Scene 1 / Luminaires (coordinates list)

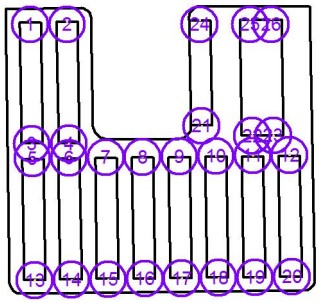
No.	Position [ft]			Rotation [°]		
	X	Y	Z	X	Y	Z
67	537.055	244.563	7.200	0.0	-30.0	0.9
68	537.667	204.699	7.200	0.0	-30.0	0.9
69	538.279	164.836	7.200	0.0	-30.0	0.9
70	538.891	124.972	7.200	0.0	-30.0	0.9
71	539.503	85.109	7.200	0.0	-30.0	0.9
72	540.115	45.245	7.200	0.0	-30.0	0.9
73	502.384	510.330	15.500	0.0	-30.0	0.9
74	502.996	470.261	15.500	0.0	-30.0	0.9
75	503.608	430.192	15.500	0.0	-30.0	0.9
76	504.220	390.123	15.500	0.0	-30.0	0.9
77	504.832	350.054	15.500	0.0	-30.0	0.9
78	505.444	309.986	15.500	0.0	-30.0	0.9
79	420.638	508.296	15.500	0.0	-30.0	-179.1
80	421.250	468.228	15.500	0.0	-30.0	-179.1
81	421.862	428.159	15.500	0.0	-30.0	-179.1
82	422.474	388.090	15.500	0.0	-30.0	-179.1
83	423.086	348.021	15.500	0.0	-30.0	-179.1
84	423.698	307.952	15.500	0.0	-30.0	-179.1
85	367.738	497.790	15.500	0.0	-30.0	0.9
86	368.362	457.817	15.500	0.0	-30.0	0.9
87	368.986	417.844	15.500	0.0	-30.0	0.9
88	369.610	377.870	15.500	0.0	-30.0	0.9
89	370.234	337.897	15.500	0.0	-30.0	0.9

Operator
Telephone
Fax
e-Mail

Exterior Scene 1 / Luminaires (coordinates list)

RWP02-80W

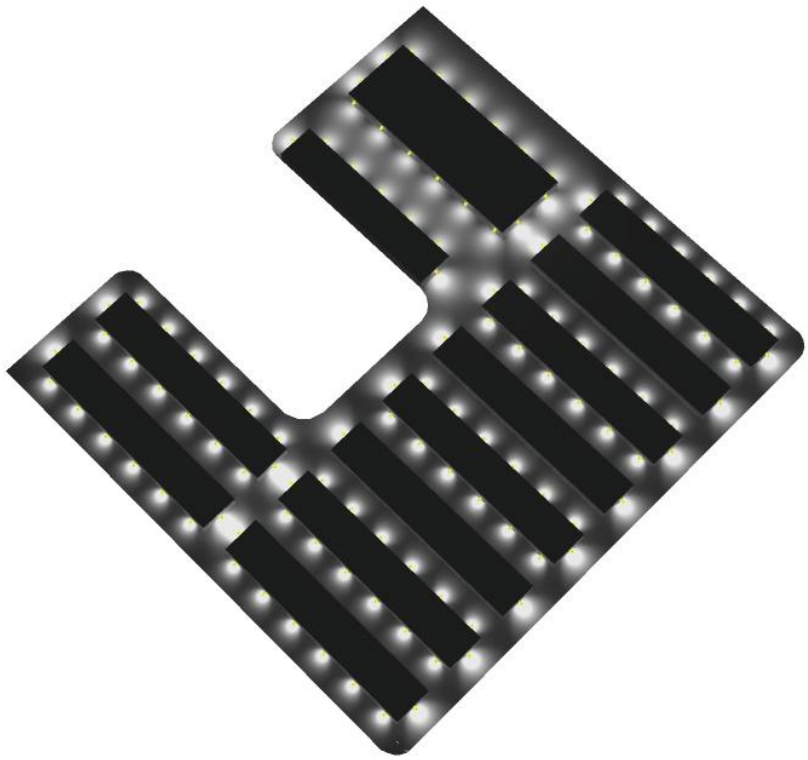
10059 lm, 79.2 W, 1 x 1 x User defined (Correction Factor 1.000).



No.	Position [ft]			Rotation [°]		
	X	Y	Z	X	Y	Z
1	23.323	514.662	11.700	0.0	-30.0	90.0
2	93.421	515.382	11.700	0.0	-30.0	90.0
3	26.837	283.284	11.700	0.0	-30.0	-90.0
4	97.356	284.157	11.700	0.0	-30.0	-90.0
5	27.735	255.926	11.700	0.0	-30.0	90.7
6	97.492	256.820	11.700	0.0	-30.0	90.7
7	167.248	257.714	11.700	0.0	-30.0	90.7
8	237.005	258.607	11.700	0.0	-30.0	90.7
9	306.761	259.501	11.700	0.0	-30.0	90.7
10	376.518	260.395	11.700	0.0	-30.0	90.7
11	446.274	261.289	11.700	0.0	-30.0	90.7
12	516.030	262.183	11.700	0.0	-30.0	90.7
13	32.424	24.758	11.700	0.0	-30.0	-89.3
14	102.180	25.652	11.700	0.0	-30.0	-89.3
15	171.937	26.546	11.700	0.0	-30.0	-89.3
16	241.693	27.440	11.700	0.0	-30.0	-89.3
17	311.450	28.334	11.700	0.0	-30.0	-89.3
18	381.206	29.228	11.700	0.0	-30.0	-89.3
19	450.963	30.122	11.700	0.0	-30.0	-89.3
20	520.719	31.016	11.700	0.0	-30.0	-89.3
21	349.269	317.637	15.500	0.0	-30.0	-90.0
22	445.144	298.467	15.500	0.0	-30.0	-90.0
23	485.299	299.173	15.500	0.0	-30.0	-90.0
24	345.477	518.717	15.500	0.0	-30.0	90.0
25	441.137	519.691	15.500	0.0	-30.0	90.0
26	481.293	520.663	15.500	0.0	-30.0	90.0

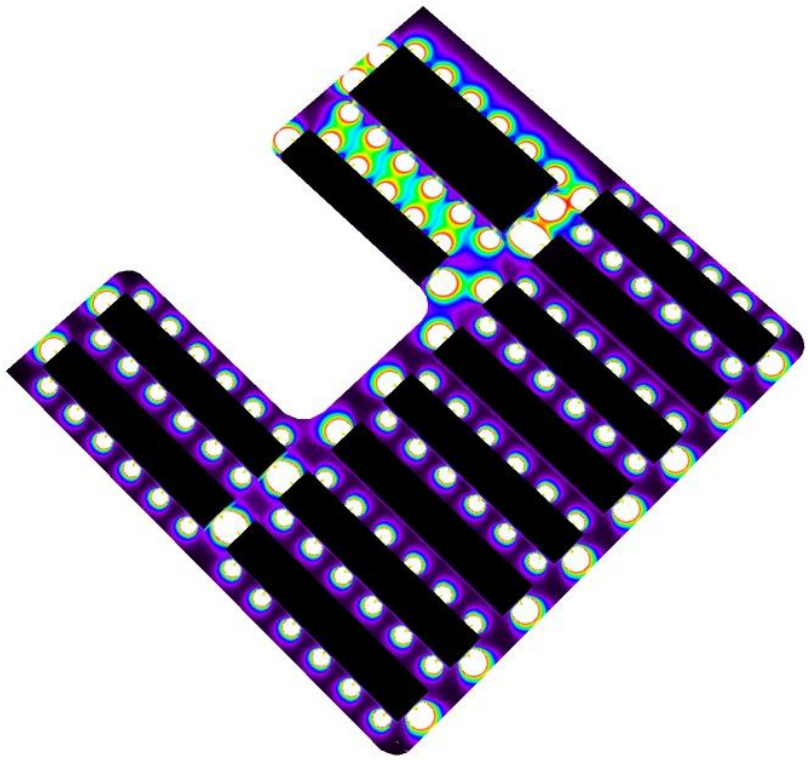
Operator
Telephone
Fax
e-Mail

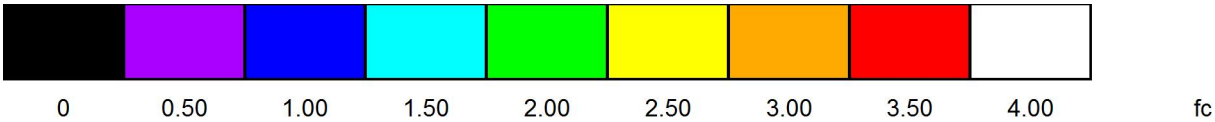
Exterior Scene 1 / 3D Rendering



Operator
Telephone
Fax
e-Mail

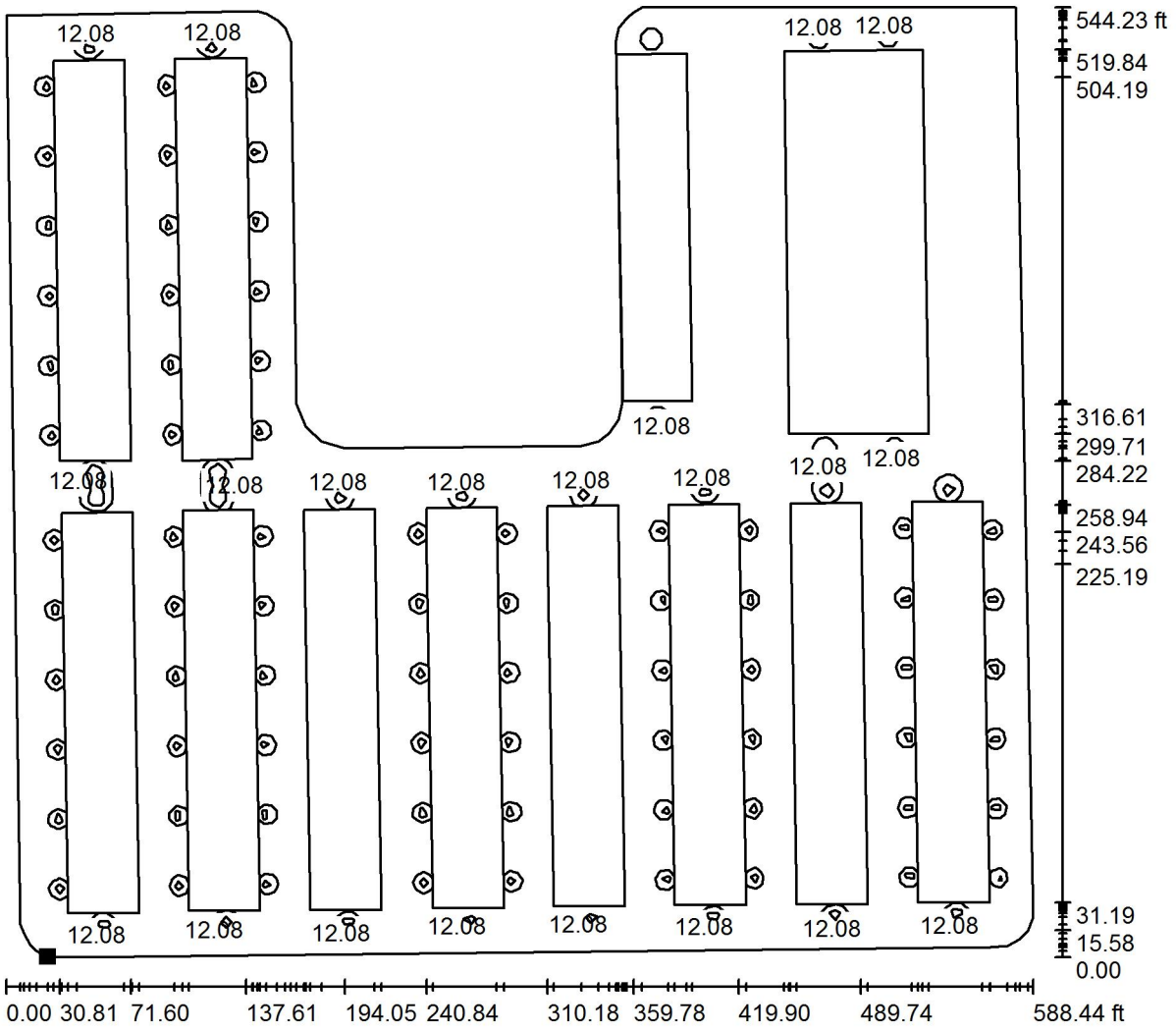
Exterior Scene 1 / False Color Rendering





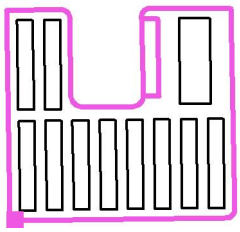
Operator
Telephone
Fax
e-Mail

Exterior Scene 1 / field / Surface 1 / Isolines (E)



Values in Footcandles, Scale 1 : 1297

Position of surface in external scene:
Marked point:
(0.000 ft, 0.000 ft, 0.000 ft)

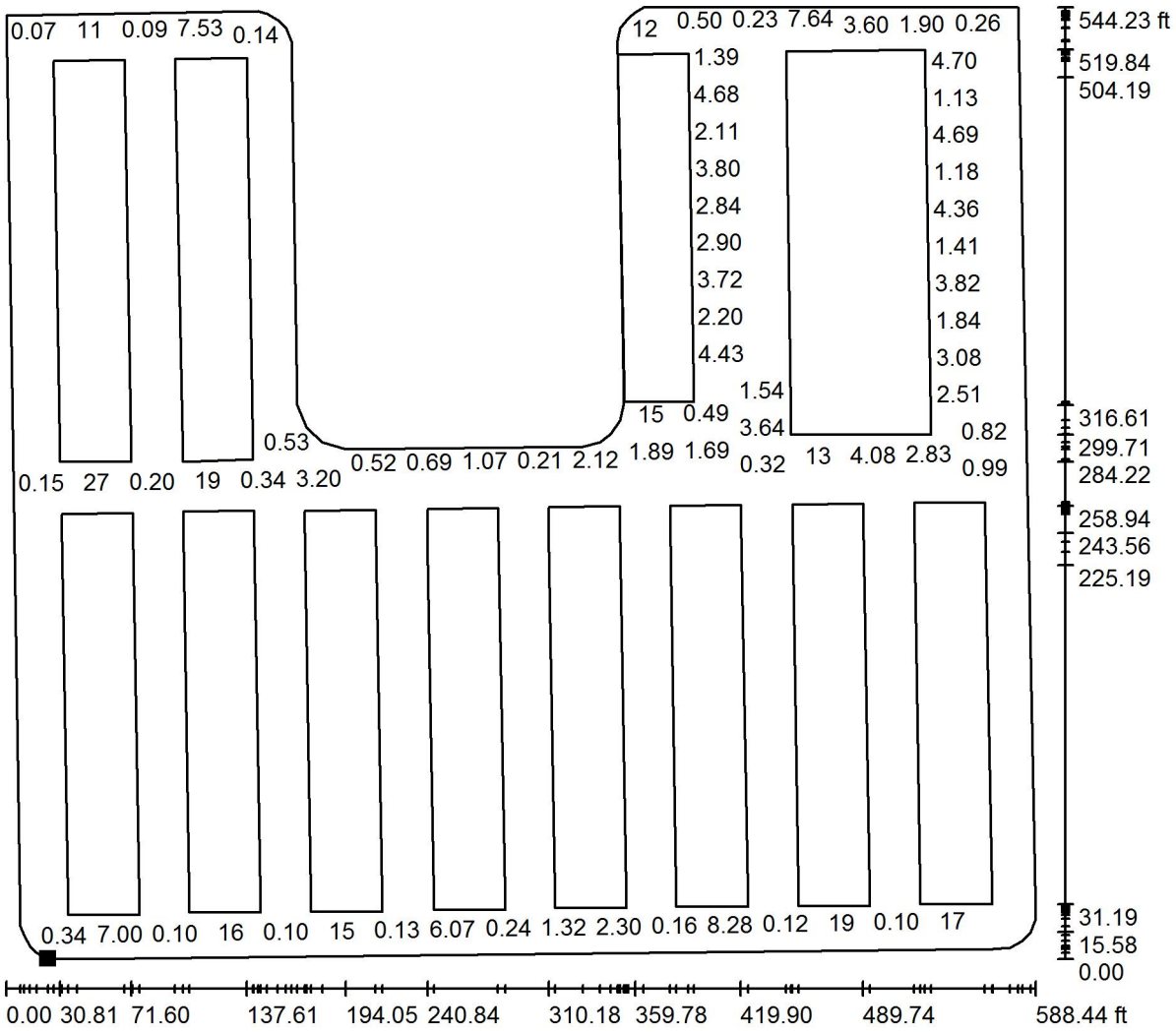


Grid: 128 x 128 Points

E_{av} [fc]	E_{min} [fc]	E_{max} [fc]	u0	E_{min} / E_{max}
3.53	0.03	56	0.009	0.001

Operator
Telephone
Fax
e-Mail

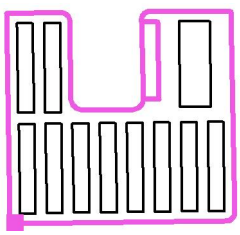
Exterior Scene 1 / field / Surface 1 / Value Chart (E)



Values in Footcandles, Scale 1 : 1297

Not all calculated values could be displayed.

Position of surface in external scene:
Marked point:
(0.000 ft, 0.000 ft, 0.000 ft)

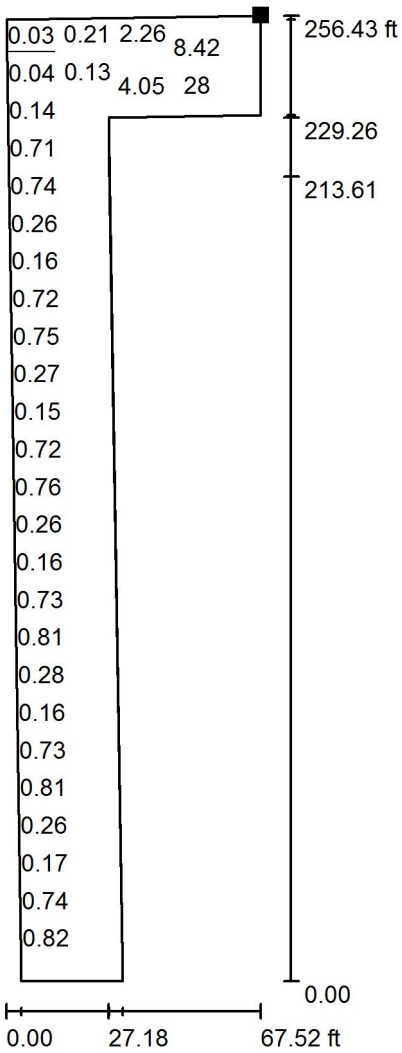


Grid: 128 x 128 Points

E_{av} [fc]	E_{min} [fc]	E_{max} [fc]	u0	E_{min} / E_{max}
3.53	0.03	56	0.009	0.001

Operator
Telephone
Fax
e-Mail

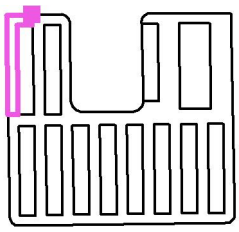
Exterior Scene 1 / Calculation Surface 1 / Value Chart (E, Perpendicular)



Values in Footcandles, Scale 1 : 612

Not all calculated values could be displayed.

Position of surface in external scene:
Marked point:
(43.494 ft, 540.657 ft, 0.100 ft)

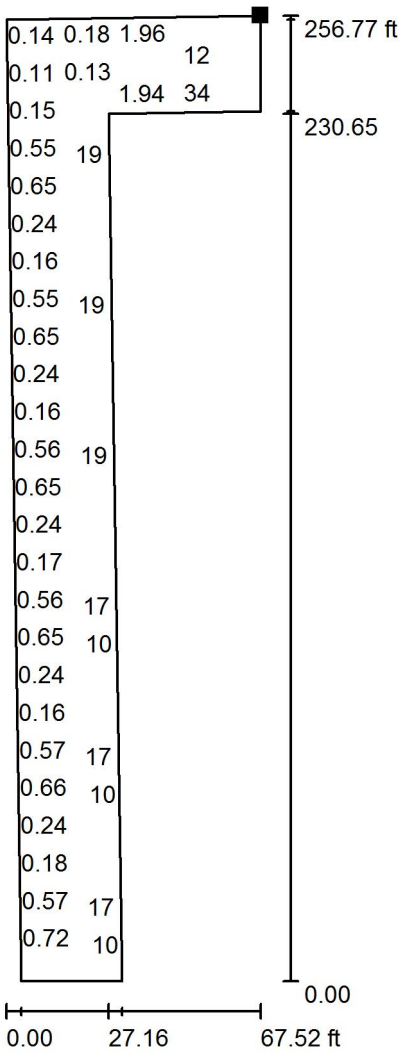


Grid: 128 x 128 Points

E_{av} [fc]	E_{min} [fc]	E_{max} [fc]	u0	E_{min} / E_{max}
3.74	0.03	57	0.008	0.001

Operator
Telephone
Fax
e-Mail

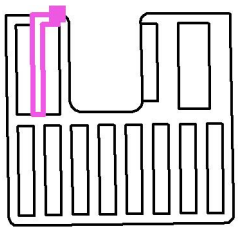
Exterior Scene 1 / Calculation Surface 1 / Value Chart (E, Perpendicular)



Values in Footcandles, Scale 1 : 613

Not all calculated values could be displayed.

Position of surface in external scene:
Marked point:
(112.207 ft, 541.220 ft, 0.100 ft)

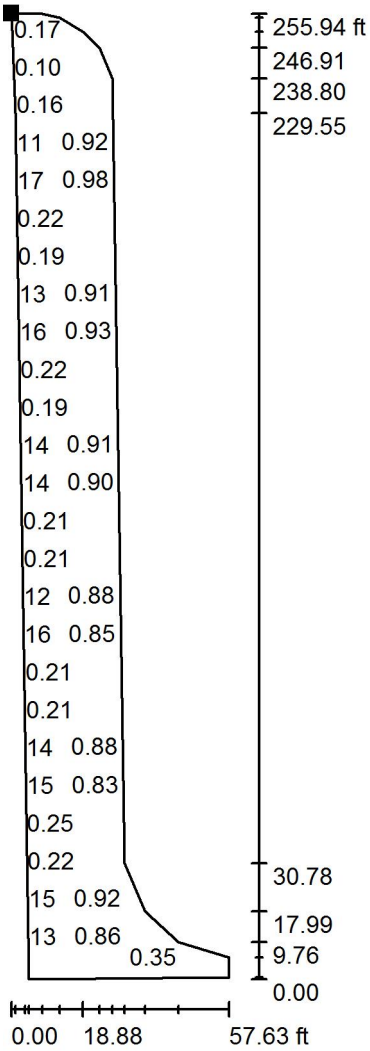


Grid: 128 x 128 Points

E_{av} [fc]	E_{min} [fc]	E_{max} [fc]	u0	E_{min} / E_{max}
3.58	0.09	57	0.025	0.002

Operator
Telephone
Fax
e-Mail

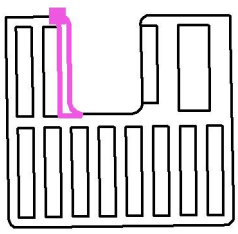
Exterior Scene 1 / Calculation Surface 1 / Value Chart (E, Perpendicular)



Values in Footcandles, Scale 1 : 611

Not all calculated values could be displayed.

Position of surface in external scene:
Marked point:
(112.395 ft, 541.765 ft, 0.100 ft)

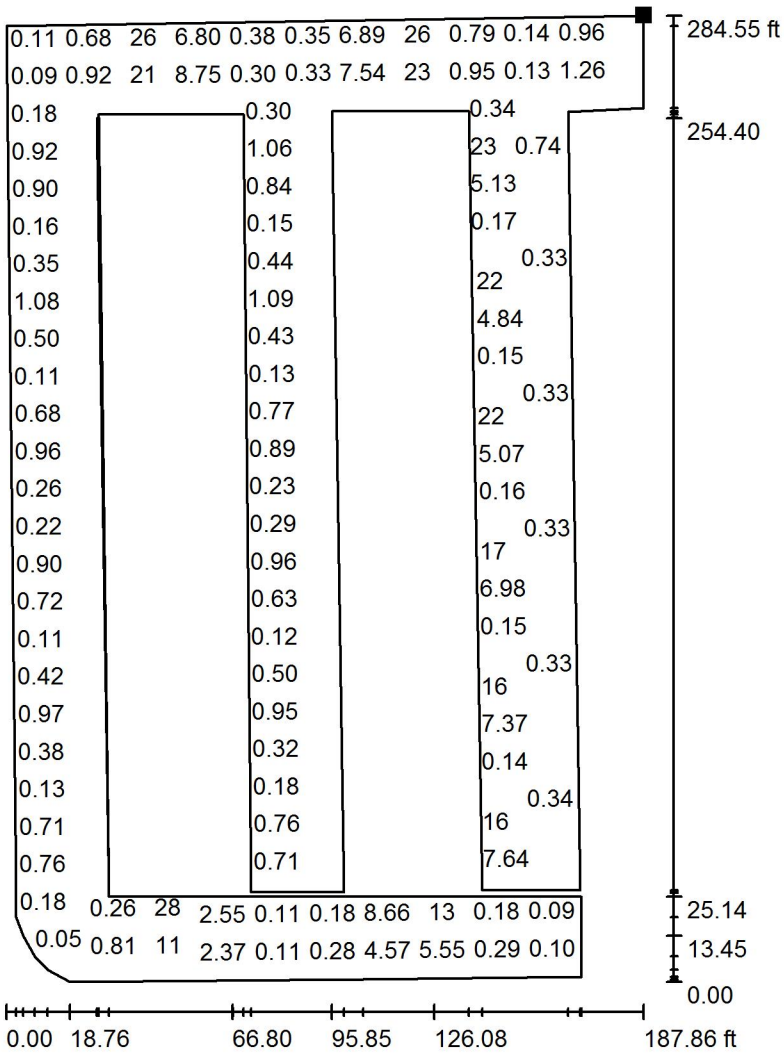


Grid: 128 x 128 Points

E_{av} [fc]	E_{min} [fc]	E_{max} [fc]	u0	E_{min} / E_{max}
3.33	0.04	56	0.011	0.001

Operator
Telephone
Fax
e-Mail

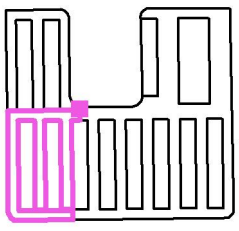
Exterior Scene 1 / Calculation Surface 1 / Value Chart (E, Perpendicular)



Values in Footcandles, Scale 1 : 679

Not all calculated values could be displayed.

Position of surface in external scene:
Marked point:
(169.106 ft, 284.549 ft, 0.100 ft)

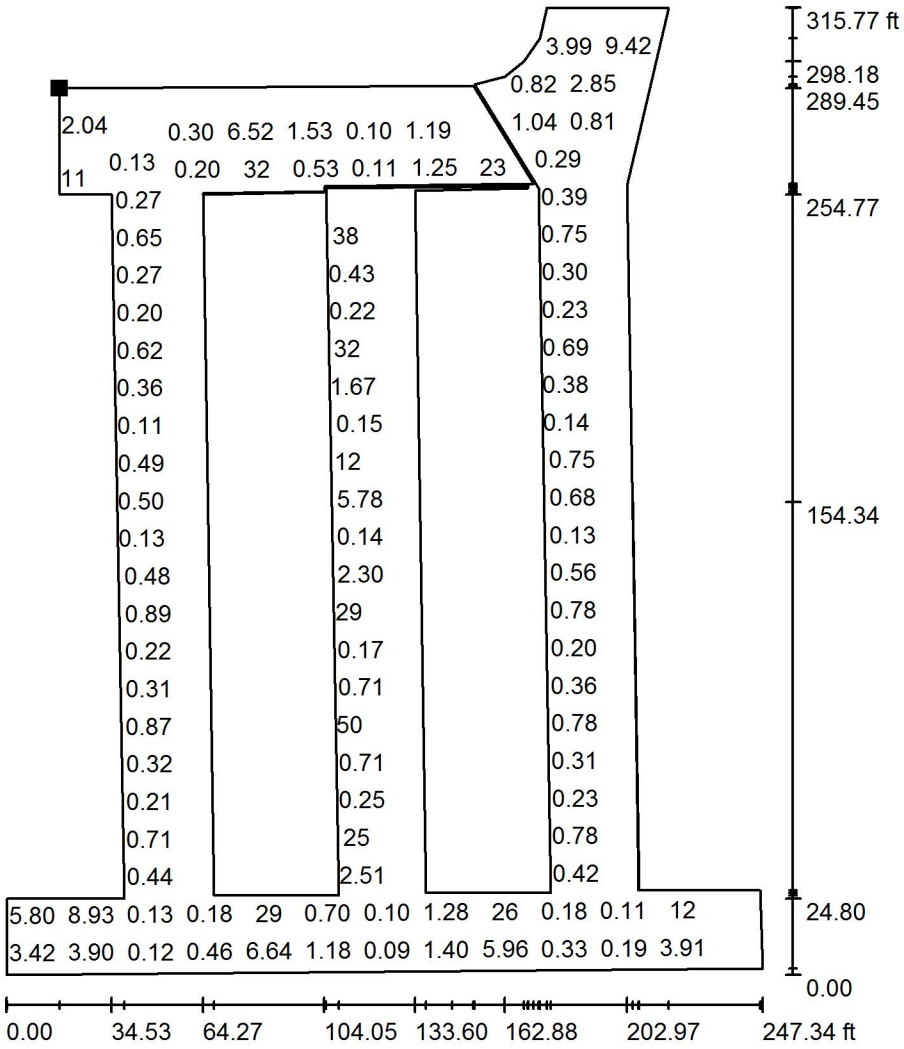


Grid: 128 x 128 Points

E_{av} [fc]	E_{min} [fc]	E_{max} [fc]	u0	E_{min} / E_{max}
4.08	0.04	58	0.009	0.001

Operator
Telephone
Fax
e-Mail

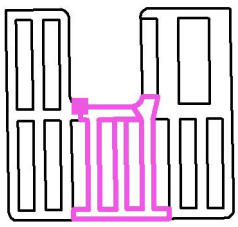
Exterior Scene 1 / Calculation Surface 1 / Value Chart (E, Perpendicular)



Values in Footcandles, Scale 1 : 753

Not all calculated values could be displayed.

Position of surface in external scene:
Marked point:
(170.024 ft, 291.588 ft, 0.100 ft)

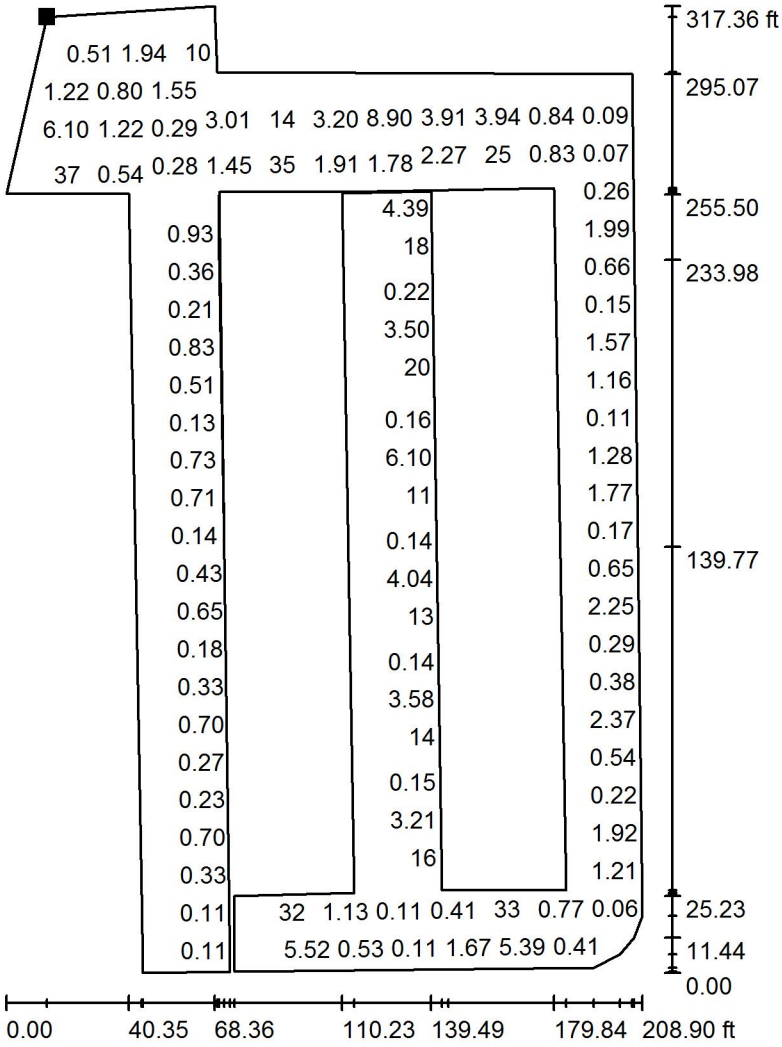


Grid: 128 x 128 Points

E_{av} [fc]	E_{min} [fc]	E_{max} [fc]	u0	E_{min} / E_{max}
3.58	0.08	57	0.023	0.001

Operator
Telephone
Fax
e-Mail

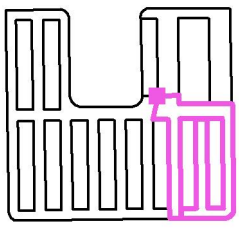
Exterior Scene 1 / Calculation Surface 1 / Value Chart (E, Perpendicular)



Values in Footcandles, Scale 1 : 757

Not all calculated values could be displayed.

Position of surface in external scene:
Marked point:
(368.986 ft, 317.910 ft, 0.100 ft)



Grid: 128 x 128 Points

E_{av} [fc]	E_{min} [fc]	E_{max} [fc]	u0	E_{min} / E_{max}
3.84	0.04	58	0.010	0.001

Sam Ber Engineering

Bruce E. Rohrer, P.E.
1216 E Gaylord St.
Mt. Pleasant, Michigan 48858
(989) 330-2150

April 28, 2021

Peter Galliant
Charter Township of Union
2010 South Lincoln Road
Mt. Pleasant, Michigan 48858

Re: Storm Water Management Plan for Broomfield Commons Condominium Association, 2420 Broomfield Road, Union Charter Township.

Mr. Galliant:

I have reviewed the Storm Water Management Plan drawings and calculations, dated April 26, 2021, prepared by Tim Bebee of CMS&D Surveying and Engineering for the above captioned project, located in the Northwest ¼ of Section 28 of Union Township, being Units A, B and C of Broomfield Commons Condominium. The proposed plan is consistent with the Union Township Storm Water Ordinance.

I have discussed the proposed project with the Isabella County Drain Commissioner, as it relates to the proposed construction of the new sidewalk, entrance drive, detention area and plantings within the County Drain Commission's Right-of-Way for the Recker Drain. The Drain Commissioner's office will be writing their own review letter addressing these proposed items in their right-of-way.

If you have any questions or need further information, please feel free to contact me at my office.

Sincerely,

Bruce E Rohrer

Bruce E, Rohrer, P.E.
Consulting Engineer
Isabella County

BER/taw

cc: Tim Bebee, CMS&D

MT. PLEASANT FIRE DEPARTMENT

INSPECTION REPORT

MCGUIRK MINI STORAGE, 1795 LEXI LN, BLDG UNNAMED, MT. PLEASANT MI 48858

DETAILS

Inspection Date: 03/01/2021 | Inspection Type: PLAN REVIEW UNION TOWNSHIP - Site | Inspection Number: 1992 | Shift: Lieutenant | Station: Mt. Pleasant Fire Department | Unit: N/A | Lead Inspector: RANDY KEELER | Other Inspectors: N/A

STATUS	CODE	DESCRIPTION
FAIL	1 PROPERTY - Identification	No Code Description Inspector: RANDY KEELER - Comments: McGuirk Mini Storage Phase II 3040 Jens Way Mt. Pleasant, MI 48858
FAIL	503.2.3 - Surface.	Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be surfaced so as to provide all- weather driving capabilities. Inspector: RANDY KEELER - Comments:
FAIL	ACCESS ROAD 150 FT - Buildings within 150ft of Access Road	All portions of a building are required to be within 150 feet of an approved Fire Department access road, in accordance with Chapter 5, Section 503.1.1 of the 2012 Edition of the International Fire Code. Inspector: RANDY KEELER - Comments: Site Plan meets above requirements
FAIL	ACCESS ROAD W/HYDRANT - Width of Road with a Fire Hydrant	Where a fire hydrant is located on a fire department apparatus access road, the minimum road width shall be 26 feet, exclusive of shoulders as in accordance with Appendix D, Section D103.1 of the 2012 Edition of the International Fire Code. Inspector: RANDY KEELER - Comments: Site Plan meets above requirements
FAIL	HYDRANT DISTANCE - Hydrant maximum distance from buildings	Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 400 feet (122 m) from a hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the fire code official. Exceptions: 1. For Group R-3 and Group U occupancies, the distance requirement shall be 600 feet (183 m). 2. For buildings equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, the distance requirement shall be 600 feet (183 m). Inspector: RANDY KEELER - Comments: Site Plan meets above requirements.

STATUS	CODE	DESCRIPTION
FAIL	KNOX BOX - Knox Box Requirements and Location	Provide a Knox Key entry device and install it in approved location by the Fire Code Official, as in accordance with Chapter 5, Section 506.1, 506.1.1 and 506.2 of the 2012 Edition of the International Fire Code. (Go to Knoxbox.com and search by fire department or zip code - select "Mt. Pleasant Fire Department" and place order for the type of Knox box desired.) Inspector: RANDY KEELER - Comments: Install knoxbox at new gate location
FAIL	SECONDARY ACCESS ROADS - Required for Commercial property	The fire code official is authorized to require more than one fire apparatus access road based on the potential for impairment of a single road by vehicle congestion, condition or terrain, climatic conditions or other factors that limit access, as in accordance with Chapter 5, Section 503, 503.1.2 of the 2012 Edition of the International Fire Code. Inspector: RANDY KEELER - Comments: Recommending second N. W. access road from Phase I mini storage to phase II.
FAIL	WATER SUPPLY (GPM) - Capable of Supplying the Required Fire Flow	Provide fire hydrants capable of supplying the required fire flow in accordance with Chapter 5, Section 507 of the 2012 Edition of the International Fire Code. The number and spacing of fire hydrants is based on the construction type and square footage of the building in accordance with Appendix B and C and tables B105.1 and C105.1 of the 2012 Edition of the International Fire Code. (Contact Fire Department to verify locations.) Inspector: RANDY KEELER - Comments: Hydrants proposed on site plan meet the above fire flow requirements of 2750gpm.

GENERAL NOTES

RANDY KEELER - 03/01/2021 @ 15:13	Recommending approval

NEXT INSPECTION DATE

No Inspection Scheduled

CONTACT SIGNATURE

Tim Bebee	Contact Refused Refusal Reason: N/A

INSPECTOR SIGNATURE

RANDY KEELER
Signed on: 03/01/2021 @ 15:13



QUESTIONS ABOUT YOUR INSPECTION?

RANDY KEELER
rkeeler@mt-pleasant.org
9897795122

From: Rick Collins
To: info@cms-d.com
Cc: Peter Gallinat
Subject: RE: Phase 2 Storage Units - McGuirk Mini Storage
Date: Thursday, April 22, 2021 1:12:56 PM
Attachments: image001.jpg

I have no issue with the attached plan.

From: info@cms-d.com <info@cms-d.com>
Sent: Thursday, April 22, 2021 11:56 AM
To: Rick Collins <rcollins@ictcbus.com>
Subject: Phase 2 Storage Units - McGuirk Mini Storage

Rick,

Attached is the Phase 2 of the McGuirk Mini Storage . They are changing the layout of some of the buildings.

Please review for Union Township Planning Commission.

If you have any questions please let me know.

Need as soon as possible.

Thank you



SITE PLAN FOR PHASE 2 - STORAGE UNITS
MCGUIRK MINI STORAGE, INC.
LINCOLN RD. & E. REMUS RD. (M-20)

B-5 ZONE	
MINIMUM FRONT YARD SETBACK	50 FT (A,B)
MINIMUM SIDE YARD SETBACK	20 FT (B)
MINIMUM REAR YARD SETBACK	25 FT (A,B)
MINIMUM LOT FRONTAGE	100 FT
MINIMUM LOT AREA (SQ FT)	16,000 SQ FT
MAXIMUM BUILDING HEIGHT	35 FT
MAXIMUM LOT COVERAGE (%)	30%

A. OFF-STREET PARKING SHALL BE PERMITTED TO OCCUPY A PORTION OF THE REQUIRED FRONT YARD, PROVIDED THAT THERE SHALL BE MAINTAINED A MINIMUM UNOBSTRUCTED AND LANDSCAPED SETBACK OF TEN (10) FEET BETWEEN THE NEAREST POINT OF THE OFF-STREET PARKING AREAS, EXCLUSIVE OF ACCESS DRIVEWAYS AND THE NEAREST RIGHT-OF-WAY LINE AS INDICATED ON THE MAJOR THOROUGHFARE PLAN.

B. A LOT IN THE B-5 DISTRICT WILL PROVIDE A SIDE AND REAR YARD OF AT LEAST FORTY (40) FEET WHEN ABUTTING A RESIDENTIAL DISTRICT.

MISS DIG:

FOR PROTECTION OF UNDERGROUND UTILITIES, THE CONTRACTOR SHALL CALL "MISS DIG" 1-800-482-7171 A MINIMUM OF 3 WORKING DAYS PRIOR TO ANY EXCAVATION. ALL "MISS DIG" PARTICIPATING MEMBERS WILL BE APPROPRIATELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

UTILITY NOTE:

THE UTILITY LOCATIONS AS HEREON SHOWN ARE BASED ON FIELD OBSERVATIONS AND A CAREFUL REVIEW OF MUNICIPAL AND UTILITY COMPANY RECORDS. HOWEVER, IT IS NOT POSSIBLE TO DETERMINE THE PRECISE LOCATION AND DEPTH OF UNDERGROUND UTILITIES WITHOUT EXCAVATION. THEREFORE, WE CANNOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THE BURIED UTILITY INFORMATION HEREON SHOWN. THE CONTRACTOR SHALL CALL "MISS DIG" (1-800-282-7171) PRIOR TO ANY EXCAVATION. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THESE UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND SHALL MAKE EVERY EFFORT TO PROTECT AND OR RELOCATE THEM AS REQUIRED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER/SURVEYOR AS SOON AS POSSIBLE IN THE EVENT A DISCREPANCY IS FOUND. UNDERGROUND SERVICE LEADS FOR GAS, ELECTRIC, TELEPHONE AND CABLE MAY BE ACROSS PROPERTY, NO INFORMATION AVAILABLE PLEASE CALL MISS DIG.

LEGEND

SYMBOLS

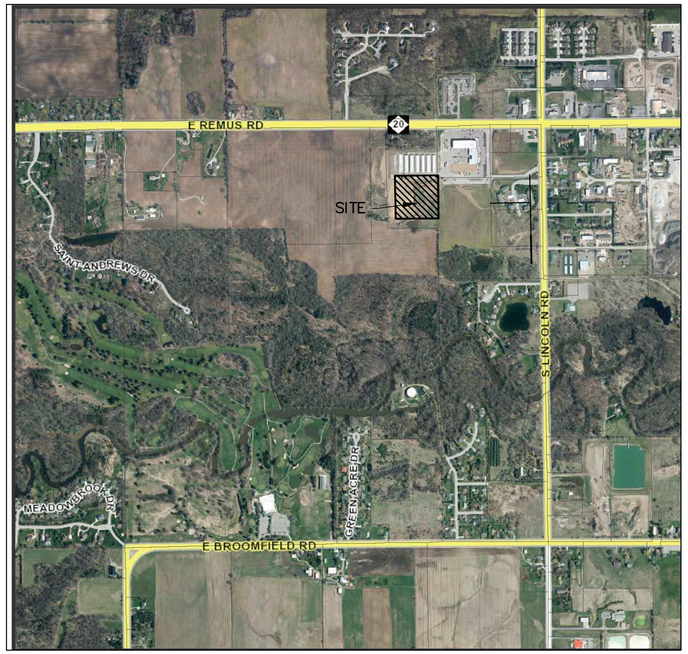
BOLLARD	GAS RISER	SOIL BORING
CATCH BASIN (CURB INLET)	GUY ANCHOR	STORM SEWER MANHOLE
CATCH BASIN (ROUND)	HYDRANT - EXISTING	TELEPHONE RISER
CATCH BASIN (SQUARE)	HYDRANT - PROPOSED	TREE - CONIFEROUS
CLEAN OUT	LIGHT POLE	TREE - DECIDUOUS
DRAINAGE FLOW	MAILBOX	UTILITY POLE
ELECTRICAL BOX	MONITORING WELL	WATER MAIN VALVE
FOUND CONC. MONUMENT	SANITARY SEWER MANHOLE	WATER SHUT-OFF
FOUND IRON	SET IRON	WATER WELL
GAS MAIN VALVE	SIGN	WOOD STAKE

LINETYPES

ELEC.	BURIED ELECTRICAL CABLE
PHONE	BURIED TELEPHONE CABLE
DITCH-CL	CENTERLINE OF DITCH
FM	FORCE MAIN
GAS	GAS MAIN
RD-CL	ROAD CENTERLINE
8" SAN	SANITARY SEWER
12" SS	STORM SEWER
EX-TOS	TOE OF SLOPE
EX-TOB	TOP OF BANK
OHE	UTILITIES - OVERHEAD
UTIL	UTILITIES - UNDERGROUND
12" WM	WATER MAIN

HATCH PATTERNS

ASPHALT - EXISTING
ASPHALT - PROPOSED
CONCRETE
GRAVEL
LANDSCAPING
RIP-RAP



PART OF THE NORTHEAST 1/4, SECTION 20, T14N-R4W,
UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN

LOCATION MAP
NOT TO SCALE

Site Plan Review 2021-03-23
Patrick J. Gaffney, P.E. Engineer Superintendent
Isabella CRC
No comments on plans. Existing Private Roads accessing M-20 and Lincoln Road.

APPROVED
By Patrick J. Gaffney, PE at 11:19 am, Apr 23, 2021

SHEET INDEX

1	COVER SHEET
2	EXISTING TOPOGRAPHY 60 SCALE
3	EXISTING TOPOGRAPHY 40 SCALE
4	SITE HORIZONTAL & UTILITY PLAN
5	SITE GRADING PLAN
6	SITE SOIL EROSION PLAN

FLOOD ZONE CERTIFICATION:

A PORTION OF SAID DESCRIBED PROPERTY IS LOCATED WITHIN AN AREA HAVING A ZONE DESIGNATION OF A BY THE SECRETARY OF HOUSING AND URBAN DEVELOPMENT, ON FLOOD INSURANCE RATE MAP NO. 26073C0305D WITH AN EFFECTIVE DATE OF FEBRUARY 5, 2014 FOR ISABELLA COUNTY, MICHIGAN COMMUNITY NO. 260812 IN UNION CHARTER TOWNSHIP, ISABELLA COUNTY, STATE OF MICHIGAN WHICH IS THE CURRENT FLOOD INSURANCE RATE MAP FOR THE COMMUNITY IN WHICH SAID PREMISES IS SITUATED.

BENCHMARKS:

BENCHMARK #1: FOUND AN ALUMINUM MICHIGAN DEPARTMENT OF TRANSPORTATION HEIGHT MODERNIZATION MARK DISK SET IN THE TOP OF A 12 INCH DIAMETER CONCRETE POST. LOCATION IS AT THE SOUTH EAST CORNER OF THE LINCOLN ROAD AND REMUS ROAD (M-20) INTERSECTION.
ELEVATION 786.62

BEARING BASIS:
PER GEODETIC OBSERVATION WGS-84 THE BEARING BETWEEN THE NORTHEAST CORNER AND THE NORTH 1/4 CORNER OF SECTION 20, T14N-R4W WAS DETERMINED TO BE S89°-42'-08"W.

SITE: PART OF THE NORTHEAST 1/4 OF SECTION 20, T.14 N. - R.04 W., UNION TOWNSHIP, ISABELLA COUNTY,

CLIENT:
MCGUIRK MINI STRORAGE
3046 JENS WAY
MT. PLEASANT, MI 48858
CONTACT: CHUCK MCGUIRK
PHONE: (989) 772-1309

CONSULTANT:
CENTRAL MICHIGAN SURVEYING & DEVELOPMENT CO., INC.
2257 EAST BROOMFIELD ROAD
MT. PLEASANT, MI 48858
CONTACT PERSON: TIMOTHY E BEBEE
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

CHARTER COMMUNICATIONS
915 E. BROOMFIELD ROAD
MT. PLEASANT, MI 48858
(989) 621-4932
RANDY BUNKER
rbunker@chartercom.com

CONSUMERS ENERGY
1325 WRIGHT AVENUE
ALMA, MI 48801
(989) 466-4282
KIM STUDT
kimberly.studt@cmsenergy.com

FRONTIER
345 PINE STREET
ALMA, MI 48801
(989) 463-0392
MARK A. MARSHALL
Mark.Marshall@ftr.com

DTE ENERGY
4420 44TH ST., S.E., SUITE B
KENTWOOD, MI 49512
(616) 954-4623
MARY JO MCKERSIE
mckersiem@dteenergy.com

MT. PLEASANT FIRE DEPARTMENT
804 EAST HIGH STREET
MT. PLEASANT, MI 48858
(989) 779-5100 EXT 5122
LT. RANDY KEELER
rkeeler@mt-pleasant.org

CHARTER TOWNSHIP OF UNION
PUBLIC WATER/PUBLIC SEWER
2010 N. LINCOLN ROAD
MT. PLEASANT, MI 48858
(989) 772-4600 EXT 24
KIM SMITH
ksmith@uniontownshipmi.com

CHARTER TOWNSHIP OF UNION
PLANNING & ZONING
2010 NORTH LINCOLN ROAD
MT. PLEASANT, MI 48858
(989) 772-4600 EXT 241
PETER GALLINAT
pgallinat@uniontownshipmi.com

DRAIN COMMISSIONERS OFFICE
ISABELLA COUNTY BUILDING
200 NORTH MAIN STREET ROOM 140
MT. PLEASANT, MI 48857
(989) 772-0911
ROBERT WILLOUGHBY
drain@isabellacounty.org

ISABELLA COUNTY ROAD COMMISSION
2261 EAST REMUS ROAD
MT. PLEASANT, MI 48858
(989) 773-7131 EXT 115
PATRICK GAFFNEY
PGaffney@isabellaroads.com

EXISITNG B-5 ZONED PARCEL DESCRIPTION:

A PARCEL OF LAND IN THE NORTHEAST 1/4 OF SECTION 20, T.14 N. - R.04 W., UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN, DESCRIBED AS FOLLOWS: TO FIX THE POINT OF BEGINNING, COMMENCE AT THE NORTHEAST CORNER OF SAID SECTION 20; THENCE S.00°-55'-57"E., ON AND ALONG THE EAST LINE OF SAID SECTION, 700.00 FEET; THENCE S.89°-42'-08"W., PARALLEL WITH THE NORTH LINE OF SAID SECTION, 1327.12 FEET TO A POINT ON THE EAST 1/8 LINE OF SAID SECTION AND THE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE S.00°-39'-12"E., ON AND ALONG SAID EAST 1/8 LINE, 622.35 FEET TO ITS INTERSECTION WITH THE NORTH 1/8 LINE OF SAID SECTION; THENCE S.89°-41'-58"W., ON AND ALONG SAID NORTH 1/8 LINE, 619.03 FEET; THENCE N.00°-55'-47"W., PARALLEL WITH SAID EAST SECTION LINE, 622.41 FEET; THENCE N.89°-42'-08"E., PARALLEL WITH SAID NORTH SECTIO LINE, 622.03 FEET BACK TO THE POINT OF BEGINNING, CONTAINING 8.87 ACRES OF LAND AND SUBJECT TO AND TOGETHER WITH ANY EASMENTS AND/OR RESTRICTIONS OF RECORD.

CMS & D
SURVEYING / ENGINEERING
2257 E. BROOMFIELD RD.
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

COVER SHEET
MCGUIRK MINI STORAGE INC.
PART OF THE NORTHEAST 1/4
SECTION 20, T14N-R4W
UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN

REVISIONS:

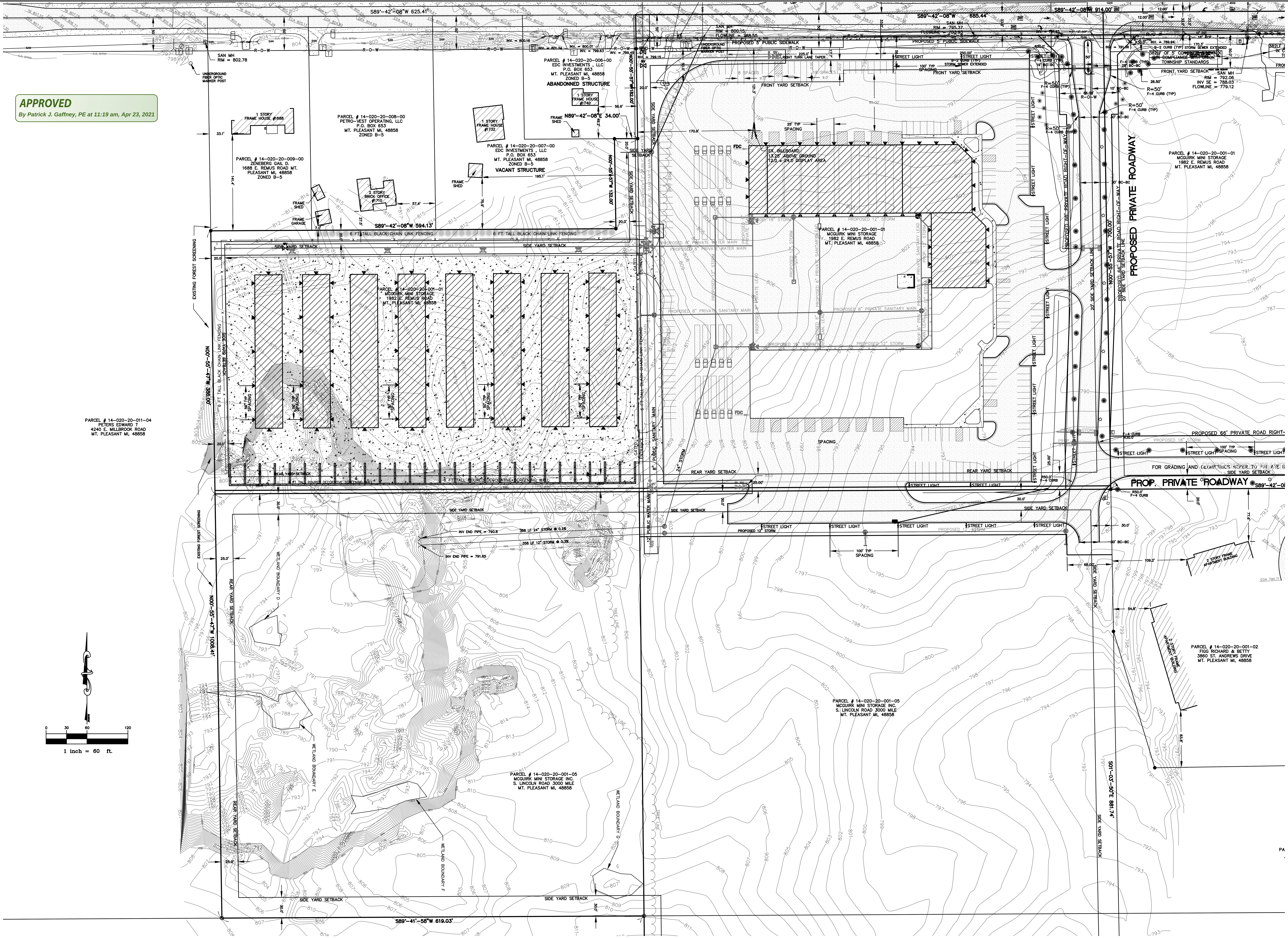
SUBMITTALS:
SUBMITTAL TO TOWNSHIP 2-23-21

JOB NUMBER: 2101-009
DRAWN BY: TELB
DESIGNED BY: N/A
CHECKED BY: TELB

SCALE: N/A
SHEET NUMBER: 1 OF 6

668

APPROVED
By Patrick J. Gaffney, PE at 11:19 am, Apr 23, 2021



CMS & D
SURVEYING / ENGINEERING
2257 E. BROOMFIELD RD.
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-0012
EMAIL: info@cms-d.com

EXISTING TOPOGRAPHY 60 SCALE

MCGUIRK MINI STORAGE INC.
PART OF THE NORTHEAST 1/4
SECTION 20, T14N-R4W
UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN

REVISIONS:

SUBMITTALS:
SUBMITTAL TO TOWNSHIP 2-23-21

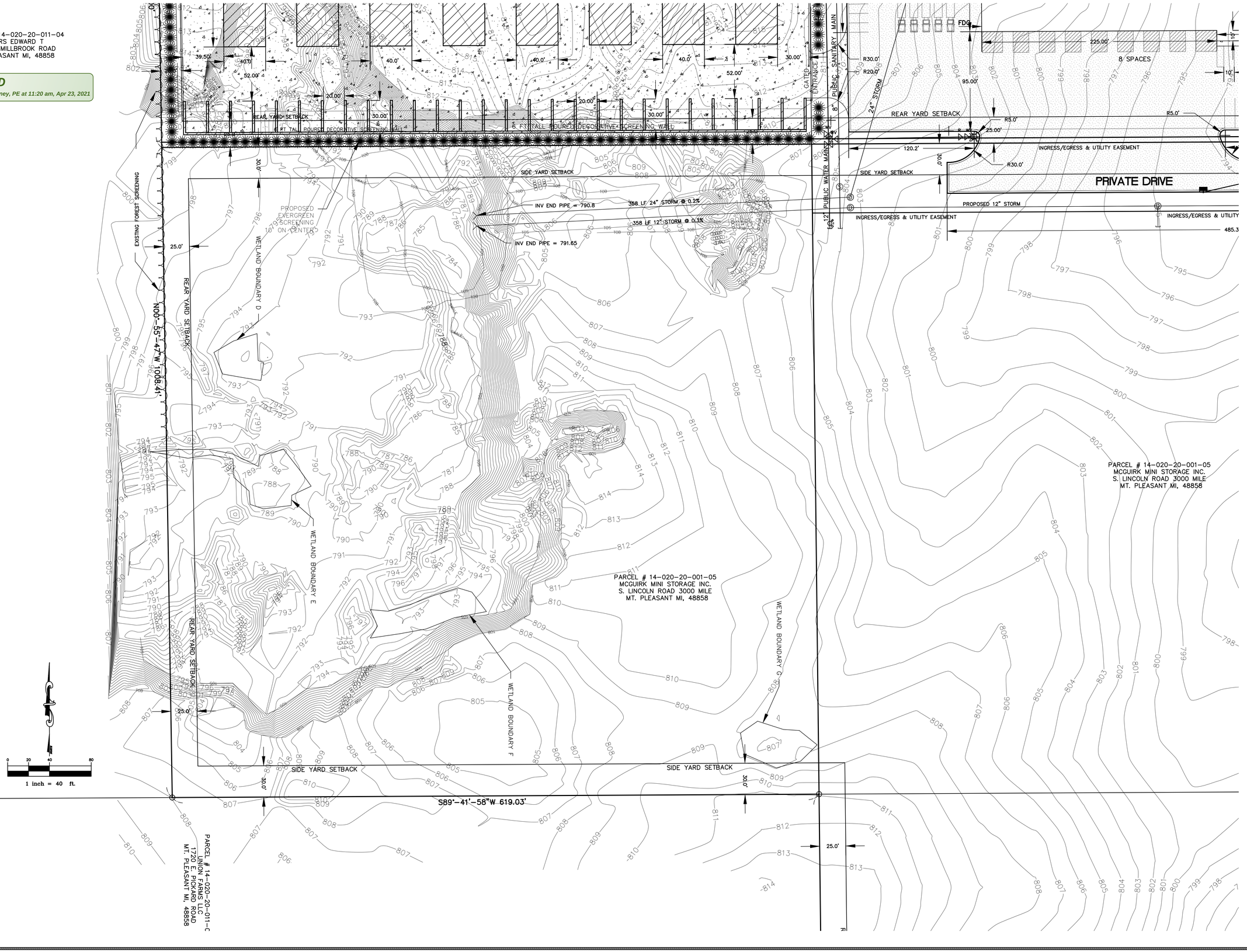
JOB NUMBER: 2101-009
DRAWN BY: TELB
DESIGNED BY: N/A
CHECKED BY: TELB

SCALE 1" = 60'

SHEET NUMBER 2 OF 6

PARCEL # 14-020-20-011-04
PETERS EDWARD T
4240 E. MILLBROOK ROAD
MT. PLEASANT MI, 48858

APPROVED
By Patrick J. Gaffney, PE at 11:20 am, Apr 23, 2021



CMS & D
SURVEYING / ENGINEERING
2257 E. BROOMFIELD RD.
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

EXISTING TOPOGRAPHY 40 SACLE

MCGUIRK MINI STORAGE INC.
PART OF THE NORTHEAST 1/4
SECTION 20, T14N-R4W
UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN

REVISIONS:

SUBMITTALS:
SUBMITTAL TO TOWNSHIP 2-23-21

JOB NUMBER: 2101-009	DRAWN BY: TELB	DESIGNED BY: N/A	CHECKED BY: TELB
SCALE 1" = 40'	SHEET NUMBER 3 OF 6		

APPROVED
By Patrick J. Gaffney, PE at 11:20 am, Apr 23, 2021

PARCEL # 14-020-20-011-00
UNION FARMS LLC
1720 E. PICKARD ROAD
MT. PLEASANT MI, 48858
ZONED B-5

PROJECT LIGHT

THE PROPOSED PHASE 2 SELF-STORAGE STRUCTURES WILL BE LIT IN THE SAME MANNER AS PHASE 1. THE LIGHTS THAT HAVE BEEN INSTALLED IN PHASE 1 ARE IN ACCORDANCE WITH UNION TOWNSHIP'S LIGHTING ORDINANCE AND WILL CONFORM TO THE NEWLY ADOPTED ORDINANCE (SECTION 8.2). CUT SHEETS FOR THE PROPOSED LIGHTING HAVE BEEN INCLUDED IN THE SUBMITTAL PACKAGE.

PROJECT LANDSCAPING

THE PROPOSED PHASE 2 PROJECT HAS BEEN REVISED FROM IT'S PREVIOUSLY SUBMITTED AND APPROVED SITE PLAN AS IT RELATES TO LANDSCAPING/SCREENING TO COMPLY WITH THE UNION TOWNSHIP ORDINANCE ADOPTED IN SPETEMBER 2020.

- SECTION 10.2A GENERAL LANDSCAPING REQUIREMENTS.
  * ALL UNPAVED PORTIONS OF THE SITE WILL BE PLANTED WITH GRASS. HYDROSEEDING WILL BE UTILIZED TO ESTABLISH THESE AREAS.

- SECTION 10.2E SCREENING.
  * EVERGREEN PLANTINGS AT 15 FOOT SPACING ALONG THE EAST, WEST AND SOUTH PROPERTY LINES HAVE BEEN SHOWN ON THE DRAWING. THE EVERGREENS WILL BE PLANTED AT TEH TOP OF A 2.5' TALL BERM AS IS SHOWN IN THE DETAIL ON THIS DRAWING SHEET. EVERGREENS OF 4-5 FEET WILL BE PLANTED AND THUS GIVING A TOTAL INITIAL SCREENING HEIGHT OF 6.5 TO 7.5 FEET, WITH THE REQUIRED 8 FOOT HEIGHT BEING REACHED WITHIN 3 YEARS. DUE TO THE SITE MASS SITE GRADING THAT WILL BE REQUIRED, PORTIONS OF THE BERM AND TREE PLANTING MAY NOT BE POSSIBLE UNTIL THE GRADING HAS BEEN COMPLETED.

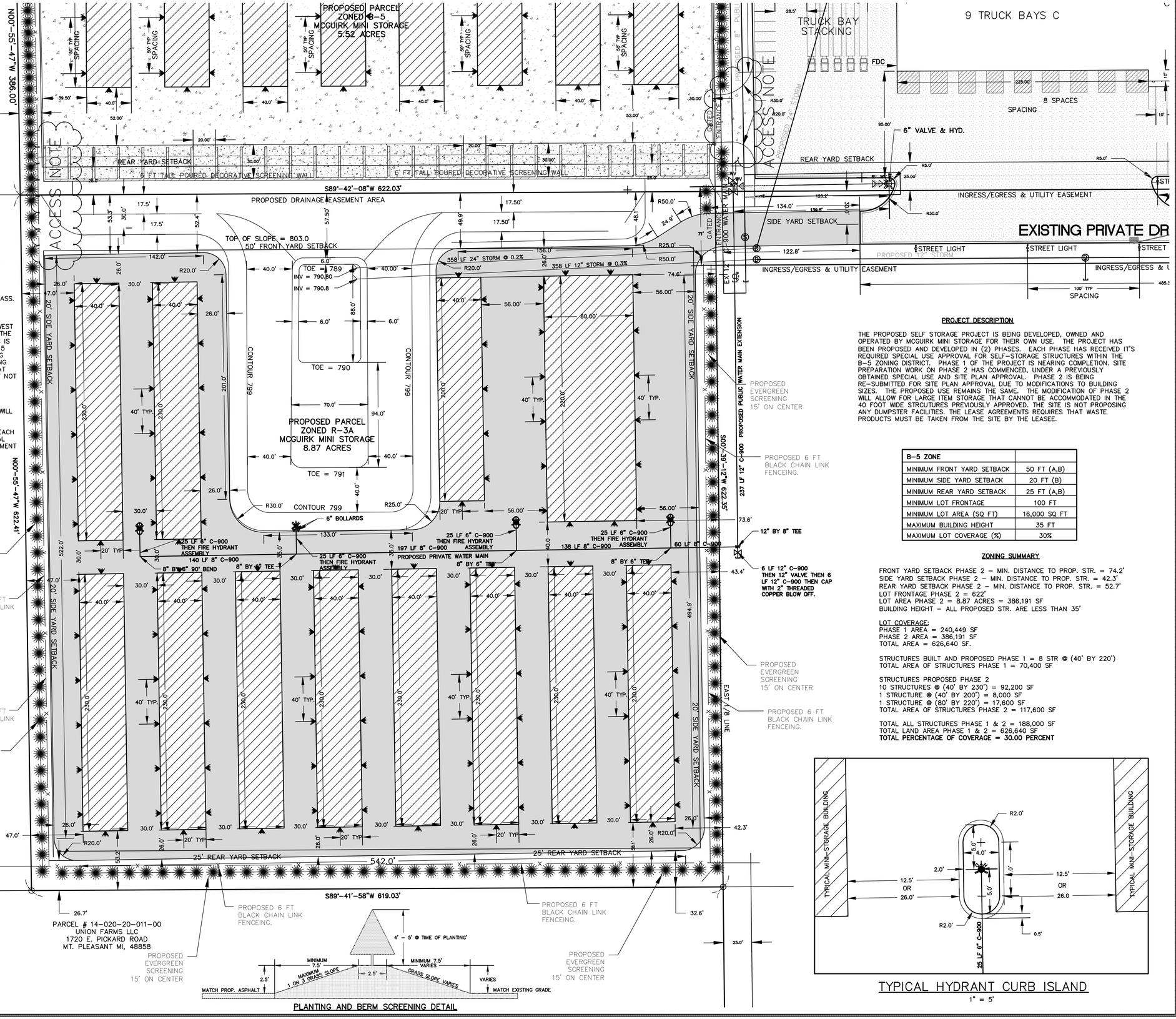
- LANDSCAPING MAINTENANCE PLAN.
  * LANDSCAPING WILL HAVE A ONE YEAR GUARANTEE FROM THE INSTALLER. PRIOR TO THE ONE YEAR ANNIVERSARY, THE INSTALLER WILL REPLACE ANY DAMAGE, DYING OR DEAD PLANTINGS. FOLLOWING THIS GUARANTEE PERIOD, EACH SPRING, THE SCREENING PLANTING WILL BE INSPECTED AND ANY DAMAGED, DYING OR DEAD PLANTINGS. DURING EACH SPRING REQUIRED PLANTING WILL BE REPLACED, AS NEEDED. GENERAL LAWN AREA WILL BE MAINTAINED AS PARK TO THE OVERALL DEVELOPMENT LANDSCAPING CONTRACT.

PROJECT UTILITIES

THE PROPOSED PHASE 2 SELF-STORAGE STRUCTURES WILL BE SERVICED WITH ELECTRICITY FOR SITE LIGHTING. A PRIVATE 8" WATER MAIN FIRE PROTECTION LINE WILL BE INSTALLED. NO BUILDING SERVICES WILL BE TAKEN OFF FROM THIS PROPOSED LINE. THE PRIVATE FIRE LINE WILL REQUIRE AN EXTENSION OF THE EXISTING 12" PUBLIC WATER MAIN AS SHOWN. NATURAL GAS MAY BE RUN TO THE LARGER STORAGE STRUCTURE FOR HEATING PURPOSES. THE OWNER/DEVELOPER IS CURRENTLY WORKING WITH DTE TO DETERMINE IF THIS IS FEASIBLE.

ACCESS NOTE

PHASE 2 HAS BEEN APPROVED BY THE CITY OF MT.PLEASANT FIRE DEPARTMENT FOR ACCESS. IN THE FUTURE THE EXISTING ACCESS DRIVE AT THE SOUTHEAST CORNER OF PHASE 1 WILL BE REMOVED AT SUCH TIME THAT THE PHASE 2 PROJECT HAS CONNECTED THE WESTERLY ACCESS FROM PHASE 2 TO PHASE 1. THE REMOVAL OF THE EXISTING ACCESS TO PHASE 1 AND THE INSTALLATION OF THE CONNECTION BETWEEN PHASE 1 AND 2 HAS BEEN REVIEWED BY THE CITY OF MT. PLEASANT FIRE DEPARTMENT AND HAS ALSO BEEN APPROVED.



PROJECT DESCRIPTION

THE PROPOSED SELF STORAGE PROJECT IS BEING DEVELOPED, OWNED AND OPERATED BY MCGUIRK MINI STORAGE FOR THEIR OWN USE. THE PROJECT HAS BEEN PROPOSED AND DEVELOPED IN (2) PHASES. EACH PHASE HAS RECEIVED IT'S REQUIRED SPECIAL USE APPROVAL FOR SELF-STORAGE STRUCTURES WITHIN THE B-5 ZONING DISTRICT. PHASE 1 OF THE PROJECT IS NEARING COMPLETION. SITE PREPARATION WORK ON PHASE 2 HAS COMMENCED, UNDER A PREVIOUSLY OBTAINED SPECIAL USE AND SITE PLAN APPROVAL. PHASE 2 IS BEING RE-SUBMITTED FOR SITE PLAN APPROVAL DUE TO MODIFICATIONS TO BUILDING SIZES. THE PROPOSED USE REMAINS THE SAME. THE MODIFICATION OF PHASE 2 WILL ALLOW FOR LARGE ITEM STORAGE THAT CANNOT BE ACCOMMODATED IN THE 40 FOOT WIDE STRCUTURES PREVIOUSLY APPROVED. THE SITE IS NOT PROPOSING ANY DUMPSTER FACILITIES. THE LEASE AGREEMENTS REQUIRES THAT WASTE PRODUCTS MUST BE TAKEN FROM THE SITE BY THE LEASEE.

B-5 ZONE	
MINIMUM FRONT YARD SETBACK	50 FT (A,B)
MINIMUM SIDE YARD SETBACK	20 FT (B)
MINIMUM REAR YARD SETBACK	25 FT (A,B)
MINIMUM LOT FRONTAGE	100 FT
MINIMUM LOT AREA (SQ FT)	16,000 SQ FT
MAXIMUM BUILDING HEIGHT	35 FT
MAXIMUM LOT COVERAGE (%)	30%

ZONING SUMMARY

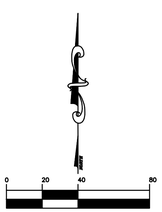
FRONT YARD SETBACK PHASE 2 – MIN. DISTANCE TO PROP. STR. = 74.2'
SIDE YARD SETBACK PHASE 2 – MIN. DISTANCE TO PROP. STR. = 42.3'
REAR YARD SETBACK PHASE 2 – MIN. DISTANCE TO PROP. STR. = 52.7'
LOT FRONTAGE PHASE 2 = 622'
LOT AREA PHASE 2 = 8.87 ACRES = 386,191 SF
BUILDING HEIGHT – ALL PROPOSED STR. ARE LESS THAN 35'

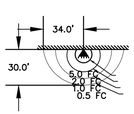
LOT COVERAGE:
PHASE 1 AREA = 240,449 SF
PHASE 2 AREA = 386,191 SF
TOTAL AREA = 626,640 SF.

STRUCTURES BUILT AND PROPOSED PHASE 1 = 8 STR @ (40' BY 220')
TOTAL AREA OF STRUCTURES PHASE 1 = 70,400 SF

STRUCTURES PROPOSED PHASE 2
10 STRUCTURES @ (40' BY 230') = 92,200 SF
1 STRUCTURE @ (40' BY 200') = 8,000 SF
1 STRUCTURE @ (80' BY 220') = 17,600 SF
TOTAL AREA OF STRUCTURES PHASE 2 = 117,600 SF

TOTAL ALL STRUCTURES PHASE 1 & 2 = 188,000 SF
TOTAL LAND AREA PHASE 1 & 2 = 626,640 SF
TOTAL PERCENTAGE OF COVERAGE = 30.00 PERCENT





TYPICAL LIGHTING PHOTOMETRICS

PLANTING AND BERM SCREENING DETAIL

TYPICAL HYDRANT CURB ISLAND
1" = 5'

CMS & D
SURVEYING / ENGINEERING
2257 E. BROOMFIELD RD.
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

SITE HORIZONTAL & UTILITY PLAN

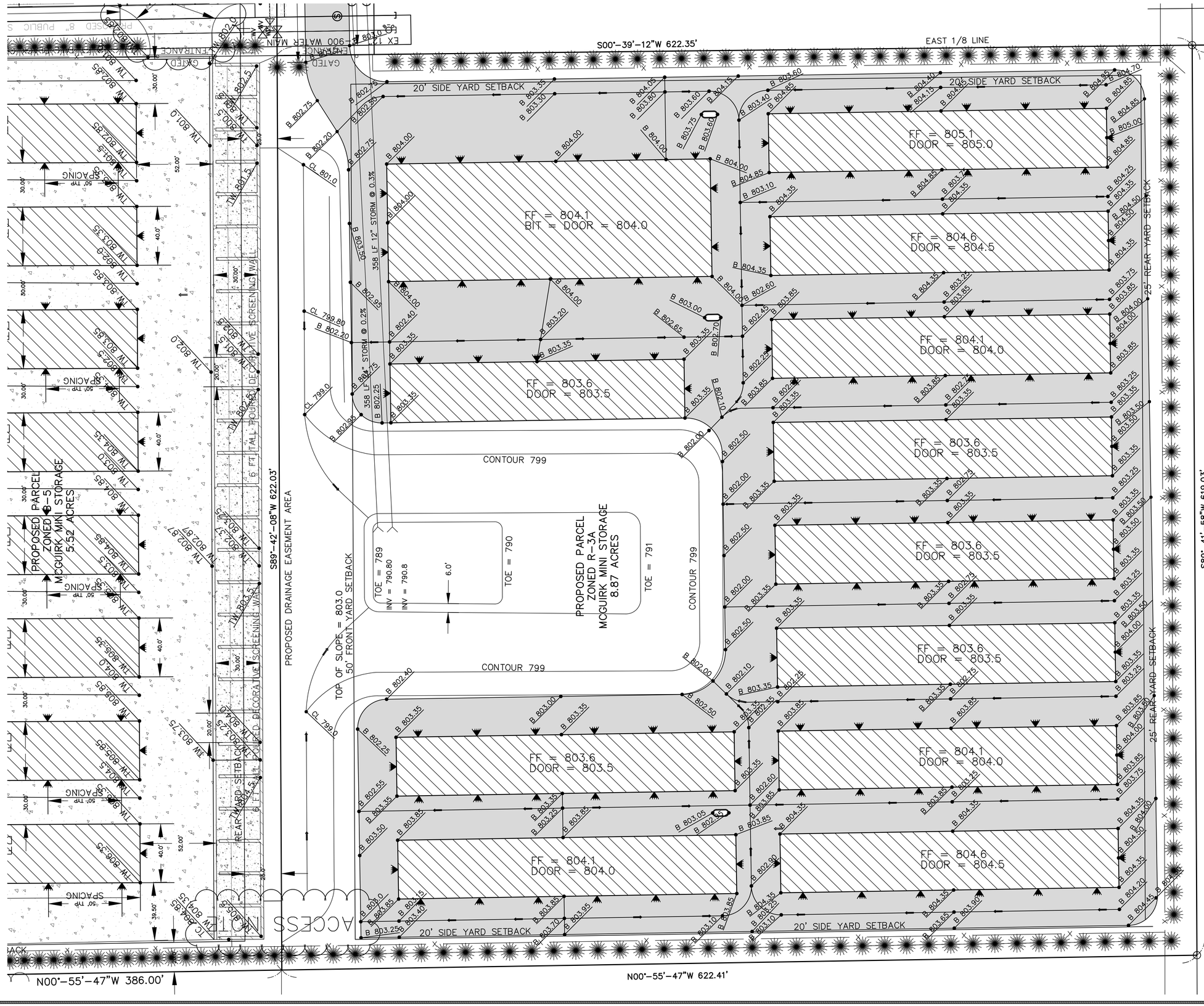
MCGUIRK MINI STORAGE INC.
PART OF THE NORTHEAST 1/4
SECTION 20, T14N-R4W
UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN

REVISIONS:

SUBMITTALS:
SUBMITTAL TO TOWNSHIP 2-23-21

JOB NUMBER: 2101-009
DRAWN BY: TELB
DESIGNED BY: TELB
CHECKED BY: TELB

SCALE 1" = 40'
SHEET NUMBER 4 OF 6



STORM WATER MANAGEMENT COMPLIANCE

STORM WATER REPORT, DETENTION CALCULATIONS FOR REQUIRED AND PROVIDED, AS WELL AS CALCULATIONS FOR THE RESTRICTED OUTFLOW HAVE BEEN SUBMITTED SEPERATELY.

APPROVED
By Patrick J. Gaffney, PE at 11:20 am, Apr 23, 2021

PARCEL #14-020-20-011-00
UNION FARMS LLC
1720 E. PICKARD ROAD
MT. PLEASANT MI, 48858

1 inch = 30 ft.

CMS & D
SURVEYING / ENGINEERING
2257 E. BROOMFIELD RD.
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

GRADING PLAN
MCGUIRK MINI STORAGE INC.
PART OF THE NORTHEAST 1/4
SECTION 20, T14N-R4W
UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN

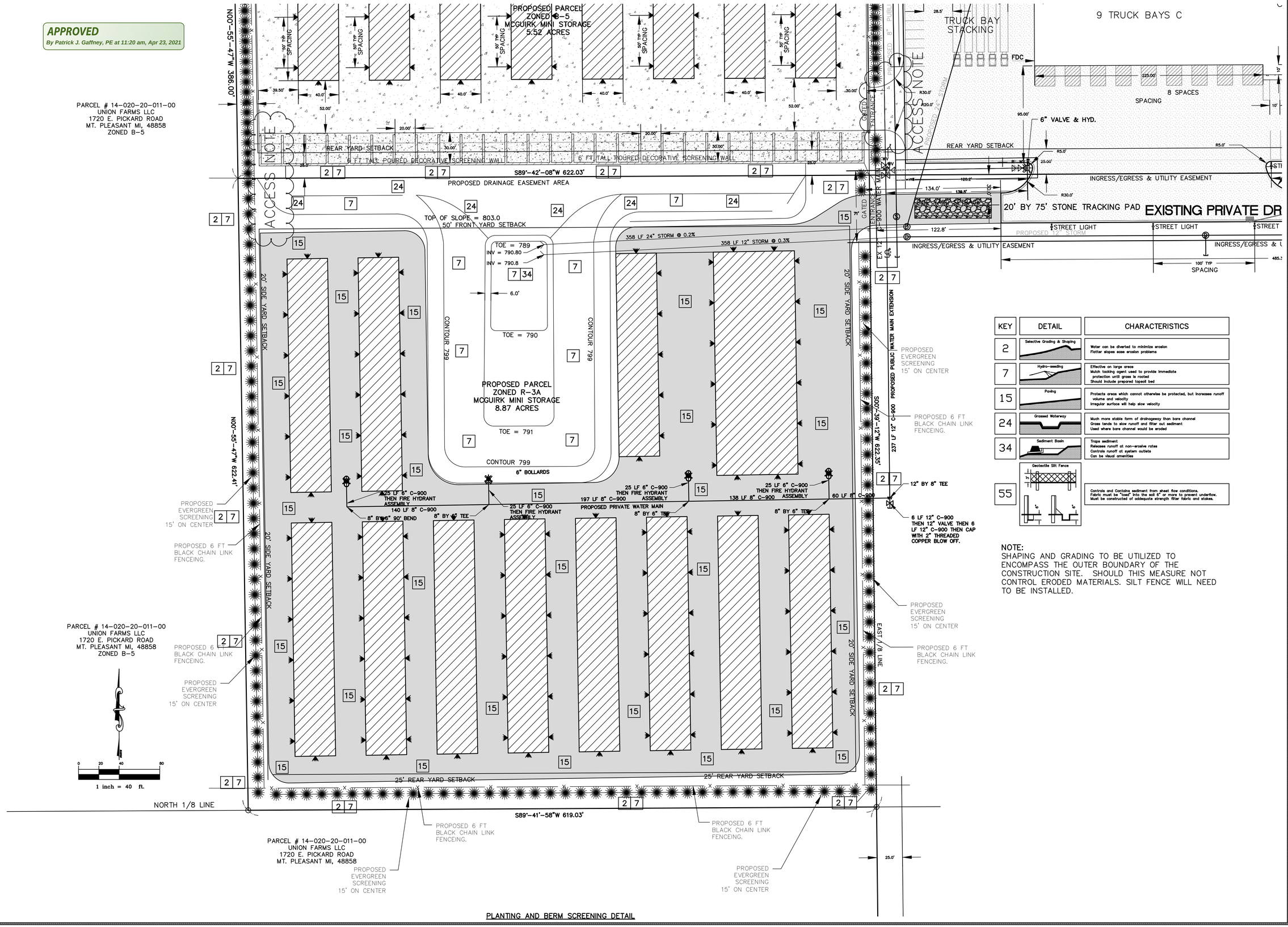
REVISIONS:

SUBMITTALS:
SUBMITTAL TO TOWNSHIP 2-23-21

SCALE	JOB NUMBER:	SUBMITTALS:	REVISIONS:
1" = 30'	2101-009	SUBMITTAL TO TOWNSHIP 2-23-21	
	DRAWN BY: TELB		
SHEET NUMBER	DESIGNED BY: TELB		
5 OF 6	CHECKED BY: TELB		

APPROVED
By Patrick J. Gaffney, PE at 11:20 am, Apr 23, 2021

PARCEL # 14-020-20-011-00
UNION FARMS LLC
1720 E. PICKARD ROAD
MT. PLEASANT MI, 48858
ZONED B-5



KEY	DETAIL	CHARACTERISTICS
2	Selective Grading & Shaping	Water can be diverted to minimize erosion Flatter slopes ease erosion problems
7	Hydro-seeding	Effective on large areas Mulch tacking agent used to provide immediate protection until grass is rooted Should include prepared topsoil bed
15	Paving	Protects areas which cannot otherwise be protected, but increases runoff volume and velocity Irregular surface will help slow velocity
24	Grassed Waterway	Much more stable form of drainageway than bare channel Grass tends to slow runoff and filter out sediment Used where bare channel would be eroded
34	Sediment Basin	Traps sediment Releases runoff at non-erosive rates Controls runoff at system outlets Can be visual amenities
55	Geotextile Silt Fence	Controls and Contains sediment from sheet flow conditions. Fabric must be "load" into the soil 6" or more to prevent underflow. Must be constructed of addequate strength filter fabric and stakes.

NOTE:
SHAPING AND GRADING TO BE UTILIZED TO ENCOMPASS THE OUTER BOUNDARY OF THE CONSTRUCTION SITE. SHOULD THIS MEASURE NOT CONTROL ERODED MATERIALS. SILT FENCE WILL NEED TO BE INSTALLED.

PLANTING AND BERM SCREENING DETAIL

CMS & D
SURVEYING / ENGINEERING
2257 E. BROOMFIELD RD.
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

SOIL EROSION & SEDIMENTATION PLAN
MCGUIRK MINI STORAGE INC.
PART OF THE NORTHEAST 1/4
SECTION 20, T14N-R4W
UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN

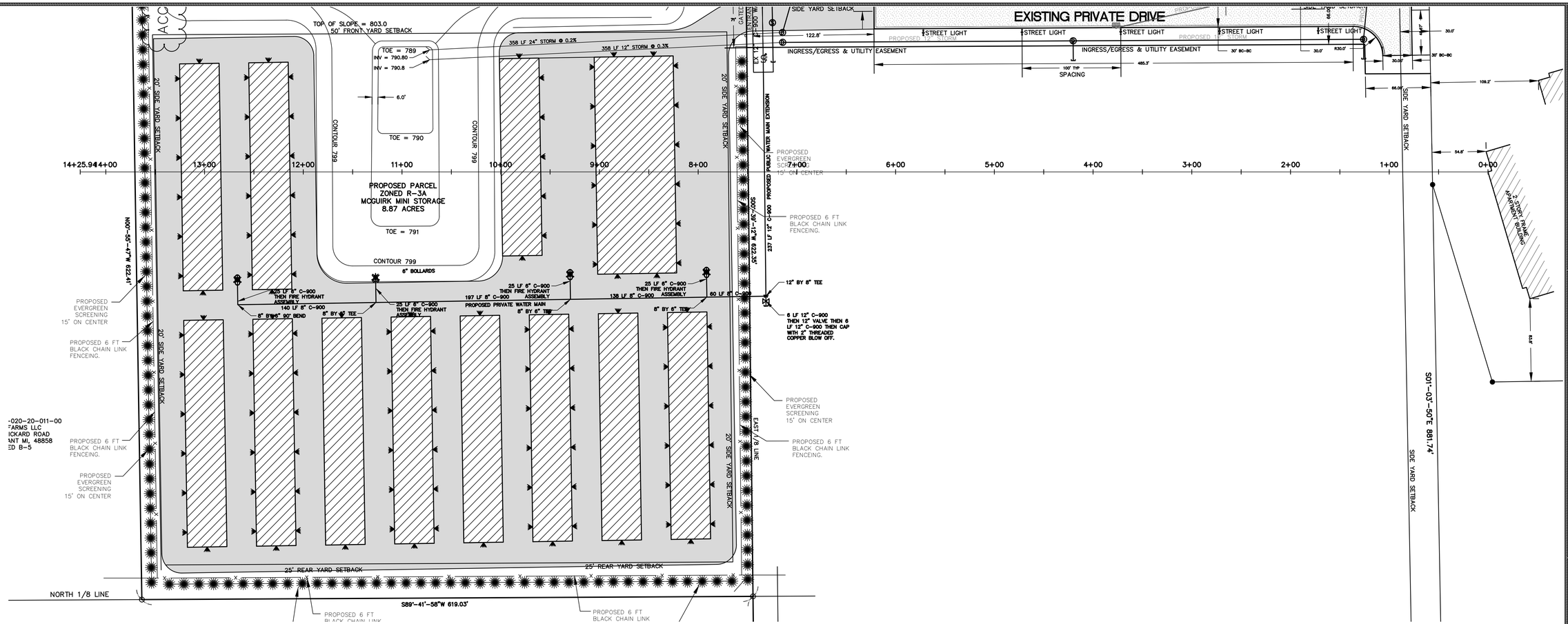
REVISIONS:

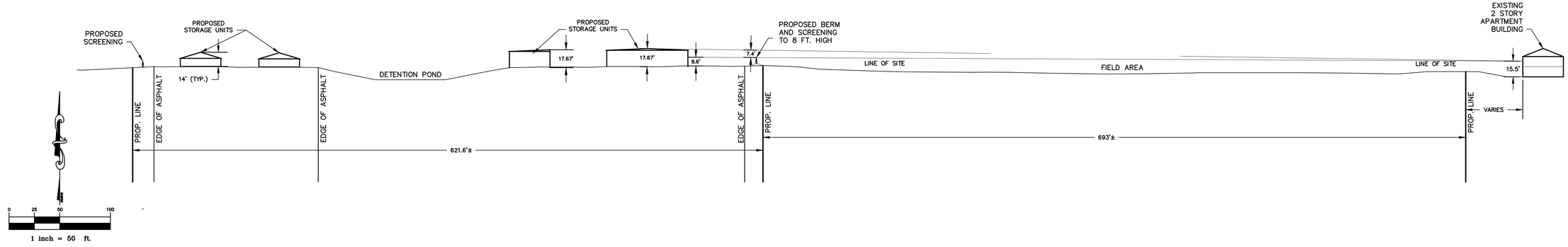
SUBMITTALS: SUBMITTAL TO TOWNSHIP 2-23-21

JOB NUMBER: 2101-009
DRAWN BY: TELB
DESIGNED BY: TELB
CHECKED BY: TELB

SCALE 1" = 40'

SHEET NUMBER 6 OF 6





APPROVED
By Patrick J. Gaffney, PE at 11:21 am, Apr 23, 2021

CMS & D
SURVEYING / ENGINEERING
2257 E. BROOMFIELD RD.
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

CROSS-SECTIONAL VIEW
MCGUIRK MINI STORAGE INC.
PART OF THE NORTHEAST 1/4
SECTION 20, T14N-R4W
UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN

REVISIONS:

SUBMITTALS:
SUBMITTAL TO TOWNSHIP 2-23-21

JOB NUMBER: 2101-009
DRAWN BY: TELB
DESIGNED BY: TELB
CHECKED BY: TELB

SCALE 1" = 50'
SHEET NUMBER 1 OF 1

Draft Motions: PSPR 21-08 McGuirk Mini Storage Phase 2 Final Site Plan Review Application

MOTION TO APPROVE THE FINAL SITE PLAN AS PRESENTED:

Motion by _____, supported by _____, to approve the PSPR 21-08 final site plan for phase 2 of the McGuirk Mini Storage buildings on parcel number 14-020-20-001-05, located on approximately 8.87 acres located at the western dead end of Lexi lane in the northeast quarter of Section 20 and in the B-5 (Highway Business) zoning district, finding that the April 23, 2021 site plan fully complies with the applicable Zoning Ordinance requirements for final site plan approval, including Sections 14.2.P. (Required Site Plan Information) and 14.2.S. (Standards for Site Plan Approval).

MOTION TO APPROVE THE FINAL SITE PLAN WITH CONDITIONS:

Motion by _____, supported by _____, to approve the PSPR 21-08 final site plan for phase 2 of the McGuirk Mini Storage buildings on parcel number 14-020-20-001-05, located on approximately 8.87 acres located at the western dead end of Lexi lane in the northeast quarter of Section 20 and in the B-5 (Highway Business) zoning district, finding that the April 23, 2021 site plan can comply with applicable Zoning Ordinance requirements for final site plan approval, including Sections 14.2.P. (Required Site Plan Information) and 14.2.S. (Standards for Site Plan Approval), subject to the following condition(s):

1. Township Public Services Department approval, prior to issuance of a building permit for this project.
2. Details and manufacturer's specification sheets for the proposed exterior wall-pack fixtures and an updated photometric plan sheet referencing the specific fixtures shall be submitted to the Zoning Administrator for administrative review and acceptance, prior to issuance of a building permit for this project.

_____

MOTION TO POSTPONE ACTION:

Motion by _____, supported by _____, to postpone action on the PSPR 21-08 final site plan for phase 2 of the McGuirk Mini Storage buildings on parcel number 14-020-20-001-05 until _____ _____, 2021 for the following reasons: _____

MOTION TO DENY:

Motion by _____, supported by _____, to deny the PSPR 21-08 final site plan for phase 2 of the McGuirk Mini Storage buildings on parcel number 14-020-20-001-05, located on approximately 8.87 acres located at the western dead end of Lexi lane in the northeast quarter of Section 20 and in the B-5 (Highway Business) zoning district, finding that the April 23, 2021 site plan does not comply with applicable Zoning Ordinance requirements, including Sections 14.2.P. (Required Site Plan Information) and 14.2.S. (Standards for Site Plan Approval), for the following reasons:

_____

_____

Community and Economic Development Department
2010 S. Lincoln Rd.
Mt. Pleasant, MI 48858
989-772-4600 ext. 232

FINAL SITE PLAN REPORT

TO:	Planning Commission	**DATE:**	May 11, 2021
FROM:	Rodney C. Nanney, AICP Community and Economic Development Director	**ZONING:**	B-5, Highway Business

PROJECT: PSPR21-09 Final Site Plan Approval application for two (2) mixed-use commercial-residential buildings.

PARCEL(S): PID 14-103-00-001-00 and 14-103-00-02-00

OWNER(S): BSP Enterprises LLC

LOCATION: Approximately 2.14 acres located at the southwest corner of E. Broomfield Rd. and Sweeney Rd. in the NE 1/4 of Section 26.

EXISTING USE: Vacant Property **ADJ. ZONING:** B-5, B-4, R-3A and *CD-4, Student Dwelling (City)*

FUTURE LAND USE DESIGNATION: *Bluegrass Center Area.* While currently more auto-centric, this area has the potential to transition into a more walkable, vibrant center. Future uses should be integrated to include multi-story, mixed-use buildings; first floor retail and office uses; public use and spaces; entertainment and restaurant venues; and additional attached housing types such as townhouses. Both vehicular and pedestrian cross connections should be promoted between sites, providing for future connections through easements, and should collectively promote a vibrant, livable center to the neighboring university population.

ACTION REQUESTED: To review and take action to approve, deny, or approve with conditions the PSPR21-09 final site plan dated April 22, 2021 for two (2) mixed-use commercial-residential buildings located at the southwest corner of E. Broomfield Rd. and Sweeney Rd. in the NE 1/4 of Section 26 and in the B-5 (Highway Business) zoning district.

Final Site Plan Review Comments

The following comments were based on the standards for final site plan approval and specific elements of the proposed site plan:

1. **Section 14.2.P. (Required Site Plan Information). COMPLIES.**

2. **Section 8 (Environmental Performance Standards). COMPLIES**

3. **Section 9 (Off-Street Parking).** The plan has been corrected from the preliminary plan. The correct parking calculations have been added. Based on the corrected calculations, excess parking that was depicted on the preliminary site plan on a separate parcel to the south has now been removed. The following detail will need to be addressed by the applicant on a revised site plan:

   - ❑ Delete the incorrect parking calculations of 145 spaces from sheet 3 of 21.

4. **Land Use Consistency with the Master Plan.** Mixed-use buildings are precisely the type of development intended for the Bluegrass Center Area in the Master Plan. **COMPLIES**.

5. **Section 6.24 (Mixed-Use Buildings).** The proposed buildings conform to the 35-foot maximum height requirement (Section 6.24.B.). The proposed locations and arrangement of commercial uses on the ground floor (street level) and apartments on the upper levels are consistent with Section 6.24.C. & D. The configuration of the proposed dwelling units includes "*adequate sleeping, kitchen, bathroom, living, and household storage space*" and is otherwise consistent with Section 6.24.D. standards. **COMPLIES.**

6. **Building Form and Composition.** The exterior façades of the proposed mixed-use buildings have changed significantly from the early conceptual designs. The architectural renderings that were first presented to the Planning Commission in 2019 were from a different architectural firm and thus are different from the architectural elevation drawings submitted for the final site plan. The original design appeared to use more brick, while the proposed building elevations (sheets A4.0 and A4.1) indicate that the exterior building facades will be more quasi-industrial in character, consisting of:

    a. A concrete block base with a limestone accent sill a few feet above grade.
    b. Horizontal metal panels and EIFS stucco over the center section.
    c. Vertical metal panels covering the majority of the remaining exterior walls.

    There are no specific building form and composition standards in the Zoning Ordinance, but there is a site plan requirement that any site plan for new development must "*be consistent with the policies of the Master Plan*" (Section 14.2.H.4.a.iii.). In this case, the Master Plan's policies for the Bluegrass Center Area and related policies for commercial development would apply, including the following policy statements on page 31:

    - *"Building architecture should possess a timeless character that signifies the presence of the commercial area and reflects pedestrian-oriented design. The use of high-quality building materials is strongly recommended to create a memorable character."*
    - *"All buildings should have exterior facades made of brick, glass, wood, and cut or simulated stone."*
    - *"All front facades should have windows and distinguishing architectural features commonly associated with the front of a building, such as awnings, cornice work, edge detailing, or other decorative finishes. Similar treatment is also needed on the side and rear depending on visibility from the roadway and surrounding property."*

    The Planning Commission will need to make a determination if the proposed building elevations (sheets A4.0 and A4.1) are consistent with the policies of the Master Plan, prior to taking action on the final site plan. If the Commission determines that revisions are needed for consistency with the Master Plan policies, final action on the site plan should be postponed to provide the applicant with time to prepare updated documentation for Commission review and acceptance.

7. **Section 7.10 (Sidewalks and Pathways). COMPLIES.**

8. **Section 8.2 (Exterior Lighting).** A photometric plan has been provided, along with a table listing some exterior fixture information. A summary table of anticipated illumination levels appears to indicate that the project conforms to the maximum 10.0 footcandle limit set by Section 8.2.C.1. However, the actual grid of site illumination levels is illegible, so the summary table information cannot be confirmed. In addition, the table of fixture details is missing information needed to confirm compliance with Section 8.2 standards. Documentation of who prepared the photometric plan is also missing. The following details will need to be addressed by the applicant on a revised site plan:

   - ❑ Correct the photometric plan sheet for legibility; to standardize the document size and configuration to match the other site plan sheets; to add the full fixture numbers, specifications, and a photo of each fixture type; and to add the plan preparer's name, company name, and contact information.
   - ❑ Add an elevation detail of the freestanding pole lighting with the height from grade labeled to the revised site plan to confirm compliance with Section 8.2.E.

9. **Section 10 (Landscaping and Screening).** The proposed landscaping plan found on page 11 of 21. The parking lot planting of 26 ornamental trees and the number of deciduous trees, ornamental trees, and shrubs along the E. Broomfield Road and Sweeney Road frontages are sufficient for applicable Section 10 standards. However, the number of actual planting shown does not match the note on the plan. The actual number of plantings shown is correct and the table is not. In addition, the required plant material installation and maintenance details are missing. The following details will need to be addressed by the applicant on a revised site plan:

   - ❑ Correct the table on sheet 11 of 21 to match plantings shown on the landscape plan.
   - ❑ Add the required plant material installation and maintenance details to a revised site plan to demonstrate compliance with Section 10.5 (Installation and Maintenance).

10. **Other site plan corrections needed.** There are other minor details on the final site plan that will need to be corrected by the applicant as part of a revised site plan submittal. These include incorrect page references in various notes (such as referencing "page x of 16" rather than the correct page out of the 21-sheet site plan document), and references to sheets for which the numbering has changed (such as references to various detail sheets and the stormwater and grading plans). The plan also does not indicate any plan for recycling services (this is a final site plan information detail).

11. **Outside agency approvals.** The applicant shall be responsible for obtaining all necessary permits or approvals from applicable outside agencies prior to final site plan approval. Approvals from the Mt. Pleasant Fire Department, the County Road Commission, Storm Water approval from the County Drain office, and the County Transportation Commission have been received. The final site plan has also been submitted to the Township's Public Services Department for review, with approval pending.

Objective

The Planning Commission shall review the application materials and site plan, together with any reports and recommendations. The Planning Commission shall identify and evaluate all relevant factors and shall then take action by motion to approve the site plan, to approve the site plan with conditions, to deny the site plan application, or to postpone further consideration of the site plan to a date certain in accordance with Section 14.2.H. of the Zoning Ordinance.

Key Findings

1. The final site plan does not include the additional parking area to the south that was shown the preliminary plan. This is fine as it is not required to meet the parking standards.
2. The proposed buildings are the first project since the adoption of the new Master Plan that achieves the desired mixed-use development for the Bluegrass Center Area. The Planning Commission will need to make a determination as to whether the proposed building elevations are fully consistent with the building form and composition policies of the Master Plan.
3. With the exception of some minor corrections, the final site plan conforms to the requirements of Section 14.2.P. (Required Site Plan Information).
4. With the exception of the pending Township Public Services Department approval, the final site plan is fully consistent with Section 14.2.S. (Standards for Site Plan Approval).

Recommendations

If the Planning Commission determines that the proposed building elevations are consistent with the Master Plan policies, then based on the above findings I would ask that the Planning Commission consider taking action to approve the PSPR21-09 final site plan, subject to the following conditions:

1. Correct typos on plan for parking calculations, landscaping, and other notes.
2. Add the required landscape plantings installation and maintenance plan details.
3. Correct the photometric plan and provide the fixture details and specifications needed to confirm compliance with Section 8.2 (Exterior Lighting).
4. Township Public Services approval.

Please contact me at (989) 772-4600 ext. 241, or via email at pgallinat@uniontownshipmi.com, with any questions about this information.

Respectfully submitted,

Rodney C. Nanney, AICP
Community and Economic Development Director

RECEIVED
APR 23 2021

Charter Township of Union

APPLICATION FOR SITE PLAN REVIEW

☐ Minor Site Plan ☐ Preliminary Site Plan ☑ Final Site Plan

A Completed Application will contain all the information required per the Zoning Ordinance, Section 14.2 (Site Plan Review).

Name of Proposed Development/Project: THE DEN OF BROOMFIELD

Common Description of Property & Address (if issued): TBD E. BROOMFIELD ROAD, MT. PLEASANT, MI 48858

Applicant's Name(s): BSP ENTERPRISES

Phone/Fax numbers: (906) 225-1360 Email: Anupmgh@yahoo.com

Address: 430 S. FIRST STREET City: CARSON CITY Zip: 48811

Legal Description: ☐ Attached ☑ Included on Site Plan Tax Parcel ID Number(s): 14-103-00-002-00, 14-103-00-001-00 14-103-00-006-00

Existing Zoning: B-5 Land Acreage: 3.35 Existing Use(s): AGRICULTURE / VACANT LAND

☑ **ATTACHED: Letter describing the project and how it conforms to Section 14.2.S. (Standards for Site Plan Approval)**

Firm(s) or Individuals(s) who prepared site plan(s)

1. Name: CENTRAL MI SURVEYING & DEVELOPMENT CO. INC. Phone: 989-775-0756 Email: tbebee@cms-d.com
2. Address: 2257 E. BROOMFIELD ROAD
City: MT. PLEASANT State: MI Zip: 48858
Contact Person: TIMOTHY E BEBEE Phone 989-775-0756

Legal Owner(s) of Property. All persons having legal interest in the property must sign this application. Attach a separate sheet if more space is needed.

1. Name: BSP ENTERPRISES LLC Phone: 906-225-1360
Address: 430 S. FIRST STREET
City: CARSON CITY State: MI Zip: 48811
Signature: A. P. Bhimalli Interest in Property:
2. Name: Anjali Bhimalli. Phone:
Address: 430 S. First St.
City: Carson City. State: MI Zip: 48811
Signature: Interest in Property:

I do hereby affirm that all the statements, signatures, descriptions, exhibits submitted on or with this application are true and accurate to the best of my knowledge and that I am authorized to file this application and act on behalf of all the owners of the property. False or inaccurate information placed upon this plan may be cause for revocation of any permits issued pursuant to site plan approval and/or removal of work installed. Approval of this plan shall not constitute the right to violate any provisions of the Zoning Ordinance or other applicable codes and ordinances.

A. P. Bhimalli — 10/6/2020

Signature of Applicant — Date

Office Use Only

Application Received By: _____ Fee Paid: $_____

Date Received: _____ Escrow Deposit Paid: $_____

Revised: 9/14/2020

CHARTER TOWNSHIP OF UNION

SITE PLAN REVIEW
HAZARDOUS SUBSTANCES REPORTING FORM

This form must be completed and submitted as part of the site plan for facilities which may use, store, or generate hazardous substances or polluting materials (including petroleum-based products)

Name of business: BSP ENTERPRISES

Name of business owner(s): A.P. BHIMALLI

Street and mailing address: 430 S. FIRST STREET
CARSON CITY, MI 48811

Telephone: 906-225-1360

Fax: _____

Email: Anupmgh@yahoo.com

I affirm that the information submitted is accurate.

Owner(s) signature and date: A. P. Bhimalli

4/23/21

Information compiled by:

Central Michigan Surveying & Development Co. Inc.

Types and Quantities of Hazardous Substances and Polluting Materials Used, Stored or Generated On-Site

Please list the hazardous substances and polluting materials (including chemicals, hazardous materials, petroleum products, hazardous wastes and other polluting materials) which are expected to be used, stored or generated on -site. Quantities should reflect the maximum volumes on hand at any time. Attach additional pages if necessary to list all hazardous substances and polluting materials.

COMMON NAME	CHEMICAL NAME (components)	FORM	MAX QUANTITY ON HAND AT ONE TIME	TYPE OF STORAGE CONTAINERS
N/A				
_____ NONE	**KEY:** LIQ. = liquid P.LIQ = pressurized liquid S = solids G = gas PG = pressurized gas			**KEY:** AGT = above ground tank DM = drums UGT = underground tank Cy = cylinders CM = metal cylinders CW = wooden or composition container TP = portable tank

PERMIT INFORMATION CHECKLIST FOR FINAL SITE PLANS

Michigan.gov/EGLEpermits

The Michigan Department of Environment, Great Lakes, and Energy (EGLE) has prepared a list of key questions to help identify what EGLE permits, licenses, or approvals of a permit-like nature may be needed. By contacting the appropriate offices indicated, you will help reduce the possibility that your project or activity will be delayed due to the untimely discovery of additional permitting requirements later in the construction process. While this list covers the existence of permits and approvals required from EGLE, it is not a comprehensive list of all legal responsibilities. A useful way to learn whether other requirements will apply is to go through the Self-Environmental Assessment in the Michigan Guide to Environmental, Health, and Safety Regulations, online at: Michigan.gov/EHSguide. Please call the Environmental Assistance Center at 800-662-9278 to talk with any of the EGLE programs noted below. [insertions and edits by Union Township]

How Do I Know that I Need a State of Michigan, County or Local Permit or Approval?	Yes ☐	No ☐
1) Will your business involve the installation or construction of any process equipment that has the potential to emit air contaminants (e.g. dry sand blasting, boilers, standby generators)? Air Quality Permit to Install, Air Quality Division (AQD), Permit Section	Y☐	N☒
2) Does the project involve renovating or demolishing all or portions of a building? Notification is required for asbestos removal and required for all demolitions even if the structure never contained asbestos. Asbestos Notification, AQD, Asbestos Program, 517-284-6777	Y☐	N☒
3) Please consult the Permitting at the Land and Water Interface Decision Tree document to evaluate whether your project needs a land and water management permit (i.e., Does the project involve filling, dredging, placement of structures, draining, or use of a wetland?). Land and Water Featured Programs (Water Resources Division - WRD) - Joint Permit Application, 517-284-5567:		
a. Does the project involve construction of a building or septic system in a designated Great Lakes high risk erosion area?	Y☐	N☒
b. Does the project involve dredging, filling, grading, or other alteration of the soil, vegetation, or natural drainage, or placement of permanent structures in a designated environmental area?	Y☐	N☒
c. Does the project propose any development, construction, silvicultural activities or contour alterations within a designated critical dune area?	Y☐	N☒
d. Does the project involve construction of a dam, weir or other structure to impound flow?	Y☐	N☒
4) Does the project involve an earth change activity (including land balancing, demolition involving soil movement, and construction) or does the project involve construction which will disturb one or more acres that come into contact with storm water that enters a storm sewer, drain, lake, stream, or other surface water? **Union Township and Isabella County**	Y☒	N☐
5) Does the project involve the construction or alteration of a water supply system system? **Union Township Public Services Department** and Drinking Water & Environmental Health Division (DWEHD), 517-284-6524	Y☒	N☐
6) Does the project involve construction or alteration of any sewage collection or treatment facility? **Union Township Public Services Department** and WRD, Part 41 Construction Permit Program (staff), 906-228-4527, or EGLE District Office	Y☒	N☐
7) Public Swimming Pool Construction (Spas/Hot Tubs) Permits: Will your business involve the construction or modification of a public swimming pool, spa or hot tub? **Union Township** and Public Swimming Pool Program, 517-284-6541, or EGLE District Office	Y☐	N☒
8) Does the project involve the construction or modification of a campground? **Union Township** and DWEHD,Campgrounds program, 517-284-6529	Y☐	N☒

9) Does the project involve construction of a facility that landfills, transfers, or processes of any type of solid non-hazardous waste on-site, or places industrial residuals/sludge into or onto the ground? Materials Management Division (MMD), Solid Waste, 517-284-6588, or EGLE District Office	Y☐	N☒
10) Does the project involve the construction of an on-site treatment, storage, or disposal facility for hazardous waste? MMD, Hazardous Waste Section, Treatment, Storage and Disposal, 517-284-6562	Y☐	N☒
Who Regulates My Drinking (Potable) Water Supply?		
11) I am buying water from the municipal water supply system Contact the **Union Township Public Services Dept.**	Y☒	N☐
12) I have a Non-Community Water Supply (Type II) Guide, Contact (District or County) Local Health Department, 517-485-0660	Y☐	N☒
13) I am a community water supply (Type I) Community Water Supply, DWEHD District Office Community Water Supply Program, 517-284-6512	Y☐	N☒
14) Do you desire to develop a withdrawal of over 2,000,000 gallons of water per day from any source including groundwater, inland surface water, or the Great Lakes and their connecting waterways? WRD, Great Lakes Shorelands Unit, Water Use Program, 517-284-5563	Y☐	N☒
Who Regulates My Wastewater Discharge System?		
15) NPDES: Does the project involve the discharge of any type of wastewater to a storm sewer, drain, lake, stream, or other surface water? WRD, EGLE District Office, or National Pollutant Discharge Elimination (NPDES) Permit Program, 517-284-5568	Y☐	N☒
16) Does the facility have industrial activity that comes into contact with storm water that enters a storm sewer, drain, lake, stream, or other surface water? WRD, Permits Section, or EGLE District Office, 517-284-5588	Y☐	N☒
17) Does the project involve the discharge of wastewaters into or onto the ground (e.g. subsurface disposal or irrigation)? WRD, Groundwater Permits Program, 517-290-2570	Y☐	N☒
18) Does the project involve the drilling or deepening of wells for waste disposal? Oil, Gas and Minerals Division (OGMD), 517-284-6841	Y☐	N☒
What Operational Permits Are Relevant to My Operation and Air Emissions?		
19) Renewable Operating Permit: Does your facility have the potential to emit any of the following: 100 tons per year or more of any criteria pollutant; 10 tons per year or more of any hazardous air pollutant; or 25 tons per year or more of any combination of hazardous air pollutants? AQD, Permit Section, 517-284-6634	Y☐	N☒
20) Does your facility have an electric generating unit that sells electricity to the grid and burns a fossil fuel? AQD, Acid Rain Permit Program, 517-780-7843	Y☐	N☒
What Operational Permits Are Relevant to My Waste Management?		
21) Does the project involve landfilling, transferring, or processing of any type of solid non-hazardous waste on-site, or placing industrial residuals/sludge into or onto the ground? MMD, 517-284-6588 or EGLE District Office	Y☐	N☒
22) Does the project involve the on-site treatment, storage, or disposal of hazardous waste? MMD, Hazardous and Liquid Waste, 517-284-6562	Y☐	N☒
23) Does the project require a site identification number (EPA number) for regulated waste activities (used oil, liquid waste, hazardous waste, universal waste, PCBs)? (Hazardous Waste Program Forms & License Applications) MMD, EGLE District Office, 517-284-6562	Y☐	N☒

24) Does the project involve the receipt, possession, manufacture, use, storage, transport, transfer, release, or disposal of radioactive material in any form? MMD, Radioactive Material and Standards Unit, 517-284-6581	Y☐	N☒
25) Does the project involve decommissioning or decontamination of tanks, piping, and/or appurtenances that may have radioactive levels above background? MMD Radioactive Material and Standards Unit, 517-284-6581	Y☐	N☒
26) Does the project involve the generation of medical waste or a facility that treats medical waste prior to its disposal? MMD, Medical Waste Regulatory Program, 517-284-6594	Y☐	N☒
What Sector-Specific Permits May be Relevant to My Business?		
Transporters		
27) Does the project involve the *transport* of some other facility's non-hazardous liquid waste? MMD, Transporter Program, 517-284-6562	Y☐	N☒
28) Does the project involve the *transport* of hazardous waste? MMD, Transporter Program, 517-284-6562	Y☐	N☒
29) Do you engage in the business of transporting bulk water for drinking or household purposes (except for your own household use)? DWEHD, Water Hauler Information, 517-284-6527	Y☐	N☒
30) Does the project involve *transport* of septic tank, cesspool, or dry well contents or the discharge of septage or sewage sludge into or onto the ground? DWEHD, Septage Program, 517-284-6535	Y☐	N☒
31) Do you store, haul, shred or process *scrap tires*? MMD, Scrap Tire Program, 517-284-6586	Y☐	N☒
Sectors		
32) Is the project a *dry cleaning* establishment utilizing perchloroethylene or a flammable solvent in the cleaning process? AQD, Dry Cleaning Program, 517-284-6780	Y☐	N☒
33) Does your *laboratory* test potable water as required for compliance and monitoring purposes of the Safe Drinking Water Act? Laboratory Services Certifications, 517-284-5424	Y☐	N☒
34) Does the project involve the operation of a *public swimming pool*? DWEHD, Public Swimming Pools Program, 517-284-6529	Y☐	N☒
35) Does the project involve the operation of a *campground*? **Union Township** and DWEHD, Campgrounds, 517-284-6529	Y☐	N☒
What Permits Do I Need to Add Chemicals to Lakes and Streams?		
36) Are you applying a chemical treatment for the purpose of aquatic nuisance control (pesticide/herbicide etc.) in a water body (i.e. lake, pond or river)? WRD, Aquatic Nuisance Control , 517-284-5593	Y☐	N☒
37) Are you applying materials to a water body for a water resource management project (i.e. mosquito control treatments, dye testing, or fish reclamation projects)? WRD, Surface Water Assessment Section, 517-331-5228	Y☐	N☒

Why would I be subject to Oil, Gas and Mineral Permitting?		
38) Do you want to operate a central production facility (applies to oil and gas production facilities where products of diverse ownership are commingled)? OGMD, Petroleum Geology and Production Unit, 517-284-6826	Y☐	N☒
39) Does the project involve the removal of sand from a sand dune area within two (2) miles of a Great Lakes shoreline? OGMD, Minerals and Mapping Unit, Sand Dune Mining Program, 517-284-6826	Y☐	N☒
40) Does the project involve decommissioning or decontamination of tanks, piping, and/or appurtenances that may have radioactive levels above background? MMD, Radioactive Protection Programs, 517-284-6581	Y☐	N☒
Petroleum & Mining, OGMD, 517-284-6826		
41) Does the project involve the diversion and control of water for the mining and processing of low-grade iron ore?	Y☐	N☒
42) Does the project involve the surface or open-pit mining of metallic mineral deposits?	Y☐	N☒
43) Does the project involve the mining of nonferrous mineral deposits at the surface or in underground mines?	Y☐	N☒
44) Does the project involve mining coal?	Y☐	N☒
45) Does the project involve changing the status or plugging of a mineral well?	Y☐	N☒
46) Does the project involve the drilling or deepening of wells for brine production, solution mining, storage, or as test wells?	Y☐	N☒

Contact **Union Township** and EGLE Permits & Bonding, OGMD, 517-284-6841

THE DEN ON BROOMFIELD

B-5 ZONE	
MINIMUM FRONT YARD SETBACK	50 FT (A,B)
MINIMUM SIDE YARD SETBACK	20 FT (B)
MINIMUM REAR YARD SETBACK	25 FT (A,B)
MINIMUM LOT FRONTAGE	100 FT
MINIMUM LOT AREA (SQ FT)	16,000 SQ FT
MAXIMUM BUILDING HEIGHT	35 FT
MAXIMUM LOT COVERAGE (%)	30%

A. THE DEPTH OF THE LOT SHALL NOT EXCEED FOUR TIMES THE LOT WIDTH, MEASUTED AT THE FRONT BUILDING LINE.
B. NO BUILDING OF STRCTURE SHALL EXCEED A HEIGHT OF TWO AND ONE-HALF STORIES OF THIRTY-FIVE FEET, EXEPT, THAT SILOS, ELEVATORS, BARNS AND OTHER STRUCTURES CUSTOMARILY NECESSARY TO FAMING SHALL HAVE A MAXIMUM HIGHT OF NINETY-NINE FEET, PROVIDED THAT ANY REQUIRED SETBACK SHALL BE INCREASED BY ONE FOOT FOR EACH FOOT THAT THE STRUCURE EXCEEDS THIRTY-FIVE FEET.
C. SIDE YARDS FACING A STREET SHALL COMPLY WITH FRONT YARD SETBACK REQUIREMENTS.

MISS DIG:

FOR PROTECTION OF UNDERGROUND UTILITIES, THE CONTRACTOR SHALL CALL "MISS DIG" 1-800-482-7171 A MINIMUM OF 3 WORKING DAYS PRIOR TO ANY EXCAVATION. ALL "MISS DIG" PARTICIPATING MEMBERS WILL BE APPROPRIATELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

UTILITY NOTE:

THE UTILITY LOCATIONS AS HEREON SHOWN ARE BASED ON FIELD OBSERVATIONS AND A CAREFUL REVIEW OF MUNICIPAL AND UTILITY COMPANY RECORDS. HOWEVER, IT IS NOT POSSIBLE TO DETERMINE THE PRECISE LOCATION AND DEPTH OF UNDERGROUND UTILITIES WITHOUT EXCAVATION. THEREFORE, WE CANNOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THE BURIED UTILITY INFORMATION HEREON SHOWN. THE CONTRACTOR SHALL CALL "MISS DIG" (1-800-282-7171) PRIOR TO ANY EXCAVATION. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THESE UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND SHALL MAKE EVERY EFFORT TO PROTECT AND OR RELOCATE THEM AS REQUIRED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER/SURVEYOR AS SOON AS POSSIBLE IN THE EVENT A DISCREPANCY IS FOUND. UNDERGROUND SERVICE LEADS FOR GAS, ELECTRIC, TELEPHONE AND CABLE MAY BE ACROSS PROPERTY, NO INFORMATION AVAILABLE PLEASE CALL MISS DIG.

LEGEND

SYMBOLS

BOLLARD	GAS RISER	SOIL BORING
CATCH BASIN (CURB INLET)	GUY ANCHOR	STORM SEWER MANHOLE
CATCH BASIN (ROUND)	HYDRANT - EXISTING	TELEPHONE RISER
CATCH BASIN (SQUARE)	HYDRANT - PROPOSED	TREE - CONIFEROUS
CLEAN OUT	LIGHT POLE	TREE - DECIDUOUS
DRAINAGE FLOW	MAILBOX	UTILITY POLE
ELECTRICAL BOX	MONITORING WELL	WATER MAIN VALVE
FOUND CONC. MONUMENT	SANITARY SEWER MANHOLE	WATER SHUT-OFF
FOUND IRON	SET IRON	WATER WELL
GAS MAIN VALVE	SIGN	WOOD STAKE

LINETYPES

ELEC.	BURIED ELECTRICAL CABLE
PHONE	BURIED TELEPHONE CABLE
DITCH-CL	CENTERLINE OF DITCH
FM	FORCE MAIN
GAS	GAS MAIN
RD-CL	ROAD CENTERLINE
8" SAN	SANITARY SEWER
12" SS	STORM SEWER
EX-TOS	TOE OF SLOPE
EX-TOB	TOP OF BANK
OHE	UTILITIES - OVERHEAD
UTIL	UTILITIES - UNDERGROUND
12" WM	WATER MAIN

HATCH PATTERNS

	ASPHALT - EXISTING
	ASPHALT - PROPOSED
	CONCRETE
	GRAVEL
	LANDSCAPING
	RIP-RAP



PART OF THE NORTHEAST 1/4, SECTION 26, T14N-R4W,
UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN
LOCATION MAP
NOT TO SCALE

PROJECT DESCRIPTION AND INTENT:

THE PROPOSED PROJECT WILL BE BUILT IN TWO PHASES. THE EASTERLY 3-STORY BUILDING WILL BE CONSTRUCTED FIRST AND BASED ON RENTALS, THE SECOND 3-STORY BUILDING WILL FOLLOW AT SUCH TIME THAT THE RENTAL SPACE IS 80 PERCENT OR MORE OCCUPIED. THE FIRST FLOOR OF THE STRUCTURE WILL BE CONSTRUCTED AS A WHITE BOX, WITH 9,688 SF (GROSS) LEASEABLE SPACE. IT IS ANTICIPATED THE THERE WILL BE 85 PERCENT OF THIS SPACE AS NET USEABLE SPACE. LEASEABLE UNITS WILL BE DIVIDED INSIDE BASED ON THE RENTER'S NEEDS. THERE IS THE POTENTIAL FOR ONE OF THE OWNER/DEVELOPER'S TO OPEN A BRANCH OF HIS MEDICAL OFFICE ON THE FIRST FLOOR. THIS AGAIN, WILL BE BASED ON THE RENTALS TO OTHERS. THE OWNERS/DEVELOPERS FULLY INTEND ON HOLDING THE PROJECT AS AN INCOME PROPERTY AND ARE NOT LOOKING TO SELL THE DEVELOPMENT. THE SECOND AND THIRD FLOOR OF THE STRUCTURE WILL BE RESIDENTIAL. THE SECOND AND THIRD FLOORS HAVE EACH (4) 2-BEDROOM UNITS HAVING 1006 SF OF LIVING SPACE AND (6) 1-BEDROOM UNITS HAVING 827 SF OF LIVING SPACE. THIS TOTALS (8) 2-BEDROOM UNITS AND (12) 1-BEDROOM UNITS PER BUILDING. EACH BUILDING HAS 8,235 SF OF NET LEASEABLE COMMERCIAL SPACE AND 17,972 SF OF LIVEABLE RESIDENTIAL SPACE. THE DEVELOPMENT RESIDES ON UNIT 1 AND 2 OF THE TALLGRASS COMMONS CONDOMINIUM. THE COMBINED LAND AREA EQUALS 2.27 ACRES. WITH A TOTAL OF 40 RESIDENTIAL UNITS, THE LAND AREA PER UNIT IS 2,472 SF/UNIT.

BUILDING FOOTPRINT TO OUTSIDE WALLS = 11,065 SF/FLOOR
GROSS COMMERICAL FIRST FLOOR AREA = 9,688 SF
NET COMMERICAL LEASEABLE FIRST FLOOR AREA = 8,235 SF
NET RESIDENTIAL LIVEABLE AREA 2 & 3 FLOORS = 17,972 SF

NON-RESIDENTIAL USES:

THE PROPOSED FIRST FLOOR DEVELOPMENT WILL BE LIMITED TO MEDICAL, PUBLIC/QUASI-PUBLIC, COMMERCIAL AND RETAIL USES ALLOWED BY RIGHT WITHIN THE B-5 DISTRICT.
NUMBER OF EMPLOYEES CANNOT BE DETERMINED AT THIS TIME FOR THE COMMERCIAL SPACE.

ANTICIPATED HOURS OF OPERATION:

HOURS OF OPERATION WILL BE BASED ON THE PROPOSED RENTER. IT IS ANTICIAPED THAT THE COMMERCIAL SPACE WILL BE CLOSED FROM 9:00 PM TO 6:00 AM.

PROJECT SCHEDULE:

THE PROJECT WILL GO OUT FOR BID ONCE FINAL SITE PLAN APPROVAL HAS BEEN OBTAINED. THE BIDDING AND CONTRACT PHASE OF THE PROJECT WILL TAKE 1-2 MONTHS. SITE CONSTRUCTION SHOULD BE ABLE TO BE STARTED APPROXIMATELY THE FIRST OF JULY 2021. THE ANTICIPATED CONSTRUCTION SCHEDULE IS 1 YEAR. THE INTENT IS TO BUILD THE SITE, LEAVING THE PHASE 2 BUILDING PAD READY TO CONSTRUCT THE SECOND BUILDING IN THE FUTURE.

DESCRIPTIONS PROVIDED: (TITLE POLICY NO. 5011400-220507e)

UNITS 1 AND 2 OF TALLGRASS COMMONS CONDOMINIUM, A COMMERCIAL SITE CONDOMINIUM ACCORDING TO THE MASTER DEED THEREOF RECORDED IN LIBER 1439, PAGES 451-520, INCLUSIVE, AND FIRST AMENDMENT RECORDED NOVEMBER 3, 2009 IN LIBER 1499, PAGES 887-894 INCLUSIVE, AND SECOND AMENDMENT RECORDED MARCH 24, 2010 IN LIBER 1511, PAGES 824-830 INCLUSIVE , AND DESIGNATED AS ISABELLA COUNTY CONDOMINIUM SUBDIVISION PLAN NO. 54, WITH RIGHTS IN GENERAL COMMON ELEMENTS AND LIMITED COMMON ELEMENTS, AS SET FORTH IN SAID MASTER DEED AND AMENDMENTS AND AS DESIGNATED IN ACT 459 OF THE PUBLIC ACTS OF MICHIGAN OF 1978 AS AMENDED.

SHEET INDEX

1.	COVER SHEET
2.	EXISTING TOPOGRAPHY
3.	HORIZONTAL LAYOUT PLAN
4.	HORIZONTAL DETAILS
5.	GRADING DETAILS
6.	GRADING PLAN
7.	DETENTION AREA DETAIL
8.	STORMWATER PLAN
9.	SITE UTILITY PLAN
10.	SOIL EROSION PLAN
11.	LANDCAPING PLAN
12.	WATERMAIN PLAN & PROFILE
13.	SANITARY SEWER PLAN & PROFILE
14.	WATERMAIN DETAILS
15.	CONSTRUCTION DETAILS
16.	LIGHTING PLAN BY OTHERS
A4.0	BUILDING ELEVATIONS SOUTH & WEST
A4.1	BUILDING ELEVATIONS NORTH & EAST
A1.0	FIRST FLOOR FLOOR PLAN
A1.1	SECOND FLOOR FLOOR PLAN
A1.2	THIRD FLOOR FLOOR PLAN

BENCHMARKS:

BENCHMARK #1: TOP OF FOUND CAPPED IRON ON WEST PROPERTY LINE.
ELEV.= 792.60

BEARING BASIS:
PER GEODETIC OBSERVATION WGS-84 THE BEARING BETWEEN THE NORTH 1/4 CORNER AND THE NORTHEAST CORNER OF SECTION 26, T14N-R4W WAS DETERMINED TO BE N89°-55'-22"E.

SITE: NORTHWEST CORNER OF THE INTERSECTION OF BROOMFIELD AND SWEENY STREET. MT. PLEASANT, MI 48858

CLIENT: THE DEN ON BROOMFIELD
B.S.P. ENTERPRISES, LLC
430 S. FIRST STREET
CARSON CITY, MI 48811
CONTACT: ANUPKUMAR K. PATEL
PHONE: (906) 225-1360
EMAIL: Anupmgh@yahoo.com

CONSULTANT: CENTRAL MICHIGAN SURVEYING & DEVELOPMENT CO., INC.
2257 EAST BROOMFIELD ROAD
MT. PLEASANT, MI 48858
CONTACT PERSON: TIMOTHY E BEBEE
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

CHARTER COMMUNICATIONS
915 E. BROOMFIELD ROAD
MT. PLEASANT, MI 48858
(989) 621-4932
RANDY BUNKER
rbunker@chartercom.com

CONSUMERS ENERGY
1325 WRIGHT AVENUE
ALMA, MI 48801
(989) 466-4282
KIM STUDT
kimberly.studt@cmsenergy.com

FRONTIER
345 PINE STREET
ALMA, MI 48801
(989) 463-0392
MARK A. MARSHALL
Mark.Marshall@ftr.com

DTE ENERGY
4420 44TH ST., S.E., SUITE B
KENTWOOD, MI 49512
(616) 954-4623
MARY JO MCKERSIE
mckersiem@dteenergy.com

MT. PLEASANT FIRE DEPARTMENT
804 EAST HIGH STREET
MT. PLEASANT, MI 48858
(989) 779-5100 EXT 5122
LT. BRAD DOEPKER
rkeeler@mt-pleasant.org

CHARTER TOWNSHIP OF UNION
PUBLIC WATER/PUBLIC SEWER
2010 N. LINCOLN ROAD
MT. PLEASANT, MI 48858
(989) 772-4600 EXT 24
KIM SMITH
ksmith@uniontownshipmi.com

CHARTER TOWNSHIP OF UNION
PLANNING & ZONING
2010 NORTH LINCOLN ROAD
MT. PLEASANT, MI 48858
(989) 772-4600 EXT 241
PETER GALLINAT
pgallinat@uniontownshipmi.com

DRAIN COMMISSIONERS OFFICE
ISABELLA COUNTY BUILDING
200 NORTH MAIN STREET ROOM 140
MT. PLEASANT, MI 48857
(989) 772-0911
ROBERT WILLOUGHBY
drain@isabellacounty.org

ISABELLA COUNTY ROAD COMMISSION
2261 EAST REMUS ROAD
MT. PLEASANT, MI 48858
(989) 773-7131 EXT 115
PATRICK GAFFNEY
PGaffney@isabellaroads.com

CMS & D
SURVEYING / ENGINEERING
2257 E. BROOMFIELD RD.
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

COVER SHEET
THE DEN ON BROOMFIELD
UNITS 1 AND 2 OF TALLGRASS COMMONS
SITE CONDOMINIUM, PART OF THE NORTHEAST 1/4
OF SECTION 26, UNION TWP., ISABELLA CO., MICHIGAN

REVISIONS: COMMENTS FROM CLIENT 02-23-20
UNION TOWNSHIP SITE REPORT 1-11-21

SUBMITTALS: SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO UNION TOWNSHIP PRELIMINARY SITE PLAN 12-23-20
SUBMITTAL TO UNION TOWNSHIP FINAL SITE PLAN 4-22-21

JOB NUMBER: 1810-109
DRAWN BY: BTM
DESIGNED BY: N/A
CHECKED BY: TELB

SCALE: N/A
SHEET NUMBER: 1 OF 21

CMS & D
SURVEYING / ENGINEERING
2257 E. BROOMFIELD RD.
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

EXISTING TOPOGRAPHY
THE DEN ON BROOMFIELD
UNITS 1 AND 2 OF TALLGRASS COMMONS SITE CONDOMINIUM, PART OF THE NORTHEAST 1/4 OF SECTION 26, UNION TWP., ISABELLA CO., MICHIGAN

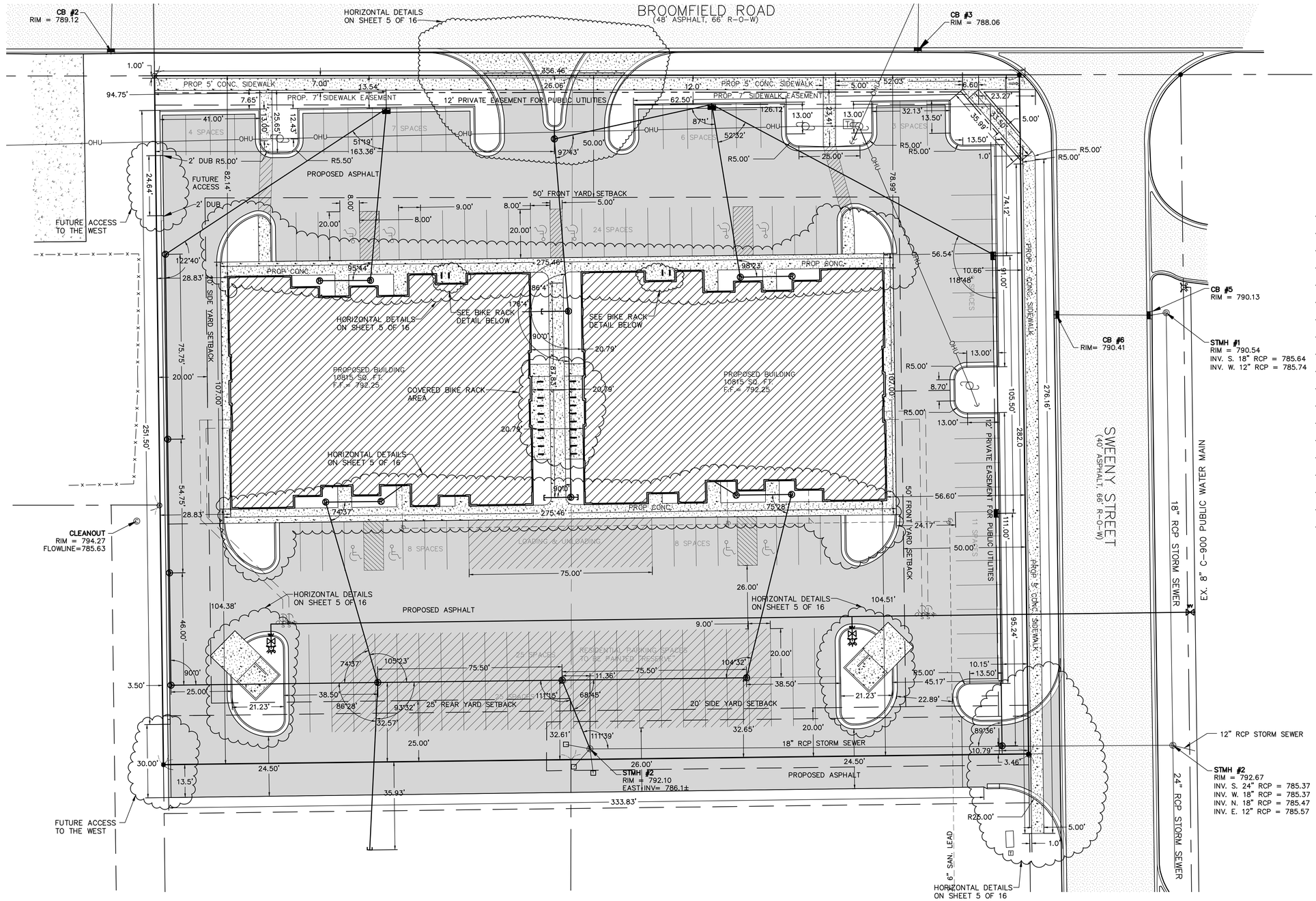
REVISIONS:
COMMENTS FROM CLIENT 02-23-20
UNION TOWNSHIP SITE REPORT 1-11-21

SUBMITTALS:
SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO UNION TOWNSHIP PRILIMINARY SITE PLAN 12-23-20
SUBMITTAL TO UNION TOWNSHIP FINAL SITE PLAN 4-22-21

JOB NUMBER: 1810-109
DRAWN BY: BTM
DESIGNED BY: N/A
CHECKED BY: TELB

SCALE: 1" = 40'

SHEET NUMBER: 2 OF 21



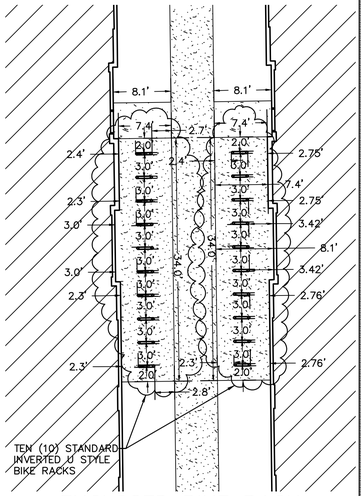
PARKING REQUIREMENTS & PARKING COUNT

- REQUIRED PARKING (RESIDENTIAL)
  - 0.7 SPACES PER BEDROOM
  - (2) @ 10,871 SF / 150 SF = **145 SPACES**
  - 24 – 1 BEDROOM UNITS = 16.8 SPACES
  - 16 – 2 BEDROOM UNITS = 22.4 SPACES
  - TOTAL FOR RESIDENTIAL = **39.2 = 40 SPACES**
- REQUIRED PARKING (COMMERCIAL)
  - 1.0 SPACES PER 200 S.F. (USABLE)
  - USABLE COMMERCIAL TAKEN AS 85% GROSS
  - (0.8) * (2) * (10,815 / 200 S.F.) = 87 SPACES

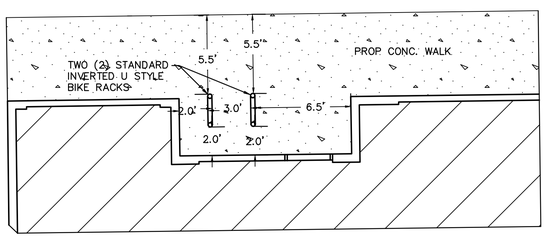
TOTAL REQUIRED PARKING = 127 SPACES

STANDARD AVAILABLE = 120 SPACES
TOTAL BARRIER FREE = 10 SPACES

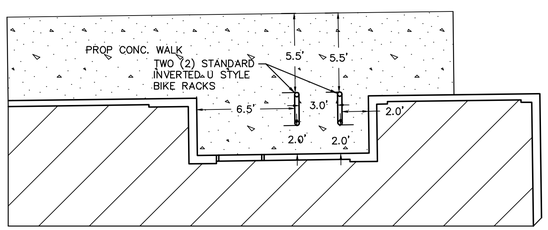
TOTAL ALL SPACES = 130 SPACES



ENCLOSED BIKE RACK DETAIL
NTS



WEST BUILDING NORTH SIDE BIKE RACK DETAILS
NTS



EAST BUILDING NORTH SIDE BIKE RACK DETAILS
NTS

CMS & D
SURVEYING / ENGINEERING
2257 E. BROOMFIELD RD.
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

HORIZONTAL SITE PLAN
THE DEN ON BROOMFIELD
UNITS 1 AND 2 OF TALLGRASS COMMONS
SITE CONDOMINIUM, PART OF THE NORTHEAST 1/4
OF SECTION 26, UNION TWP., ISABELLA CO., MICHIGAN

REVISIONS:
COMMENTS FROM CLIENT 02-23-20
UNION TOWNSHIP SITE REPORT 1-11-21

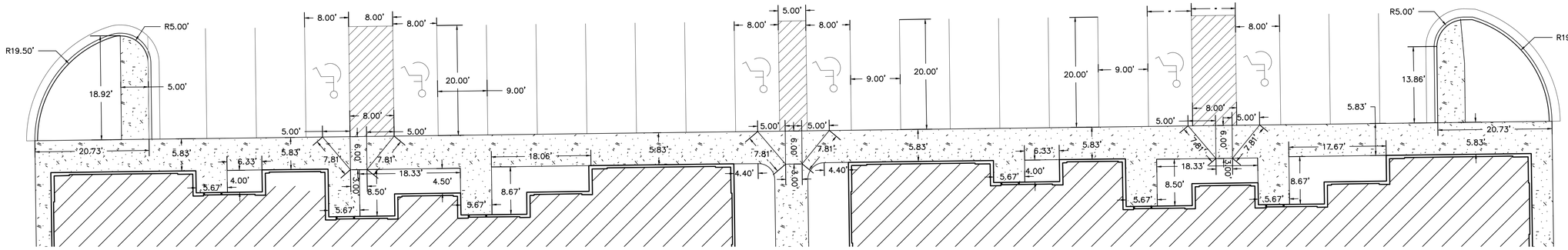
SUBMITTALS:
SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO UNION TOWNSHIP PRLIMINARY SITE PLAN 12-23-20
SUBMITTAL TO UNION TOWNSHIP FINAL SITE PLAN 4-22-21

JOB NUMBER: 1810-109
DRAWN BY: BTM
DESIGNED BY: TELB
CHECKED BY: TELB

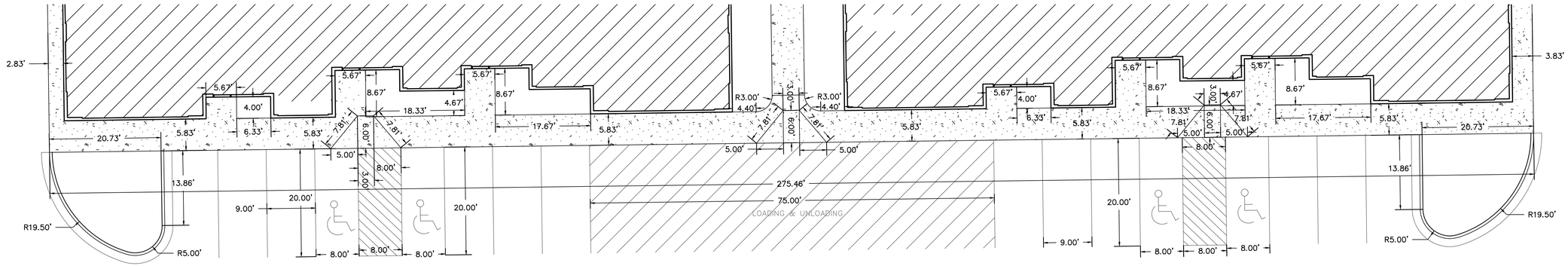
SCALE: 1" = 20'
SHEET NUMBER: 3 OF 21

0 10 20 40
1 inch = 20 ft.

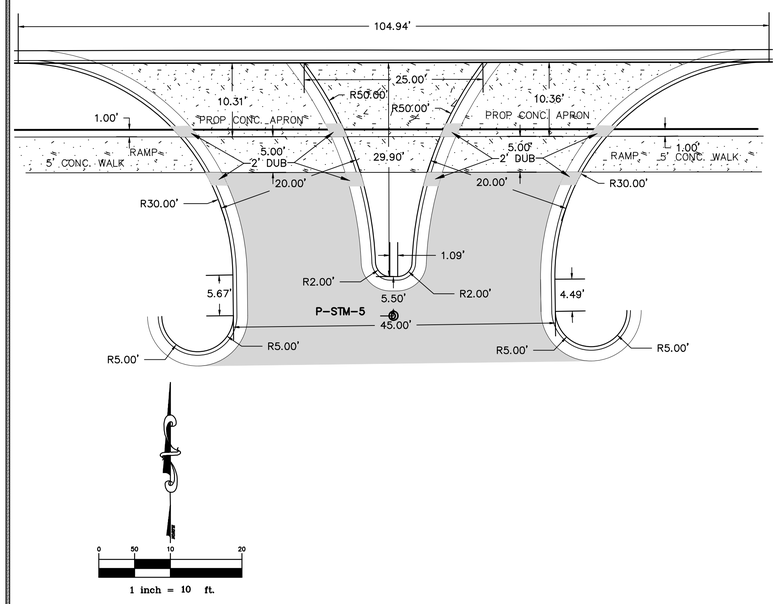
NORTH SIDEWALK DETAIL
SCALE: 1" = 10'



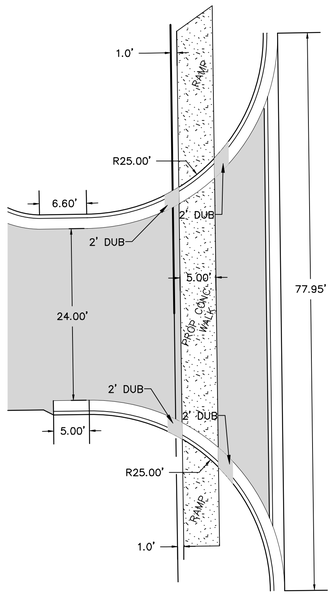
SOUTH SIDEWALK DETAIL
SCALE: 1" = 10'



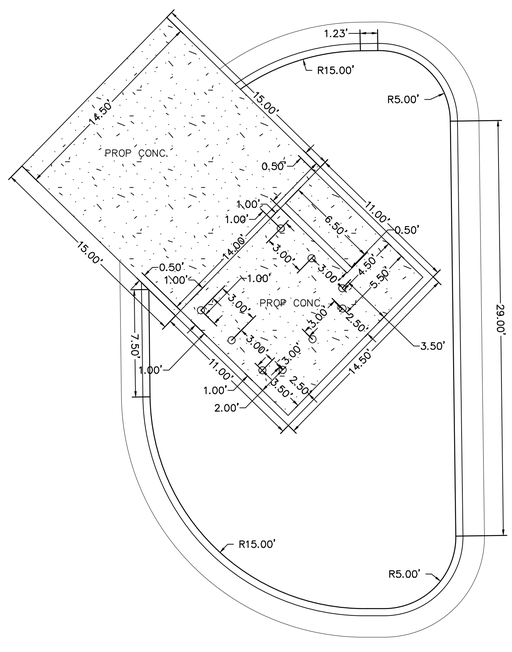
NORTH SIDE DRIVE ENTRANCE DETAIL
SCALE: 1" = 10'



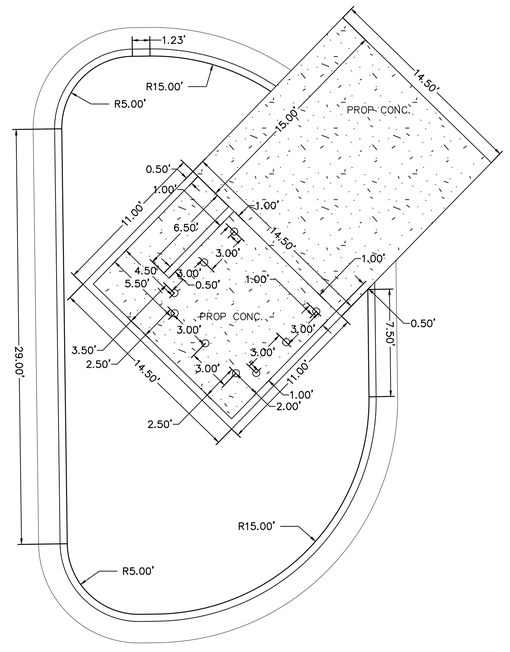
EAST SIDE DRIVE ENTRANCE DETAIL
SCALE: 1" = 10'



WEST DUMPSTER PAD DETAIL
SCALE: 1" = 5'



EAST DUMPSTER PAD DETAIL
SCALE: 1" = 5'



CMS & D
SURVEYING / ENGINEERING
2257 E. BROOMFIELD RD.
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

HORIZONTAL DETAILS
THE DEN ON BROOMFIELD
UNITS 1 AND 2 OF TALLGRASS COMMONS
SITE CONDOMINIUM, PART OF THE NORTHEAST 1/4
OF SECTION 26, UNION TWP., ISABELLA CO., MICHIGAN

REVISIONS:	
COMMENTS FROM CLIENT	02-23-20
UNION TOWNSHIP SITE REPORT	1-11-21

SUBMITTALS:	
SUBMITTAL TO CLIENT	02-23-20
SUBMITTAL TO CLIENT	02-23-20
SUBMITTAL TO UNION TOWNSHIP PRLIMINARY SITE PLAN	12-23-20
SUBMITTAL TO UNION TOWNSHIP FINAL SITE PLAN	4-22-21

JOB NUMBER: 1810-109	DESIGNED BY: TELB	SCALE: 1" = 10'	
DRAWN BY: BTM	CHECKED BY: TELB	SHEET NUMBER: 4 OF 21	

0 10 20 40

1 inch = 20 ft.

SCALE 1" = 20'	JOB NUMBER: 1810-109	SUBMITTALS: SUBMITTAL TO CLIENT 02-23-20	REVISIONS: COMMENTS FROM CLIENT 02-23-20
	DRAWN BY: BTM	SUBMITTAL TO CLIENT 02-23-20	UNION TOWNSHIP SITE REPORT 1-11-21
SHEET NUMBER 5 OF 21	DESIGNED BY: TELB	SUBMITTAL TO UNION TOWNSHIP PRLIMINARY SITE PLAN 12-23-20	
	CHECKED BY: TELB	SUBMITTAL TO UNION TOWNSHIP FINAL SITE PLAN 4-22-21	

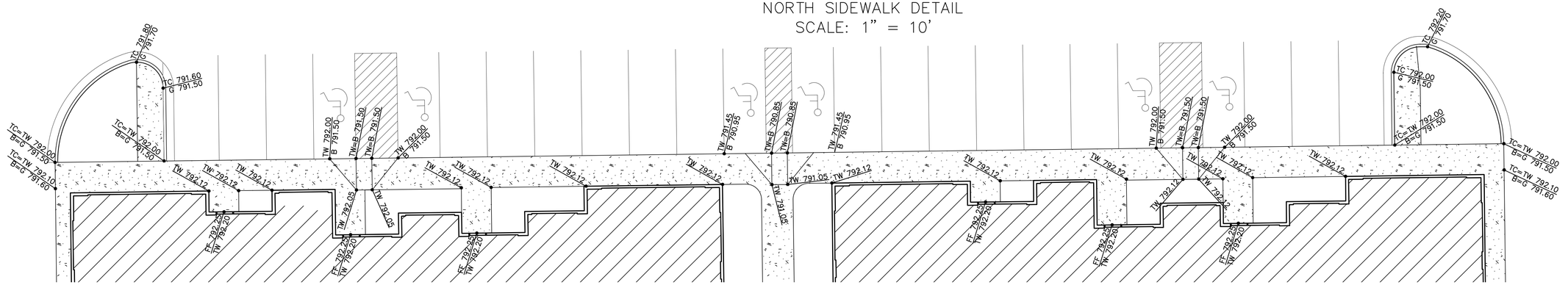
GRADING PLAN

THE DEN ON BROOMFIELD

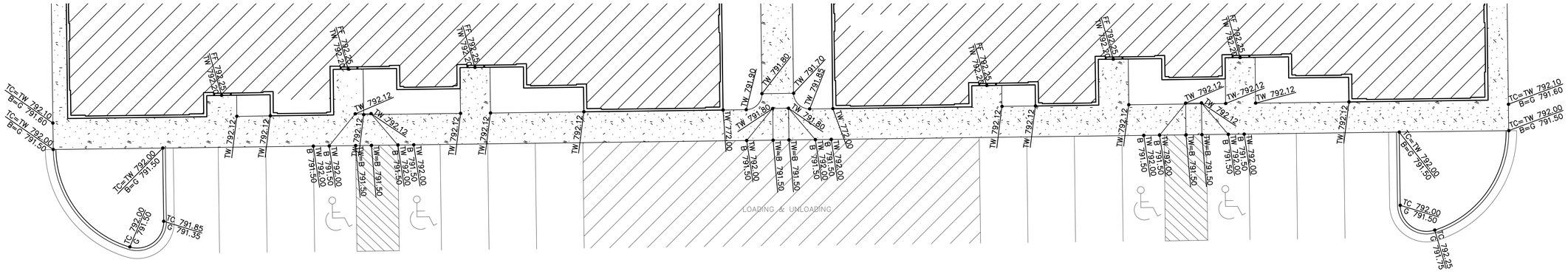
UNITS 1 AND 2 OF TALLGRASS COMMONS
SITE CONDOMINIUM, PART OF THE NORTHEAST 1/4
OF SECTION 26, UNION TWP., ISABELLA CO., MICHIGAN

CMS & D
SURVEYING / ENGINEERING
2257 E. BROOMFIELD RD.
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

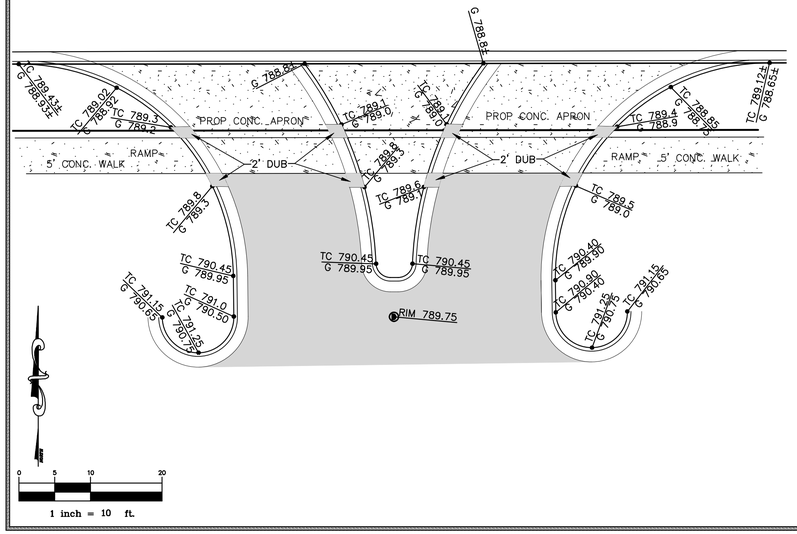
NORTH SIDEWALK DETAIL
SCALE: 1" = 10'



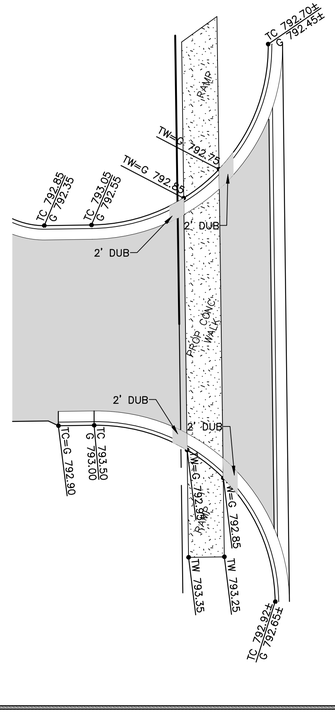
SOUTH SIDEWALK DETAIL
SCALE: 1" = 10'



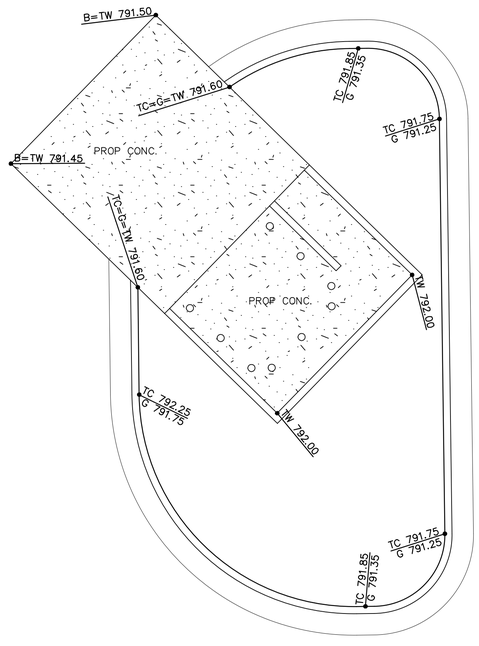
NORTH SIDE DRIVE ENTRANCE DETAIL
SCALE: 1" = 10'



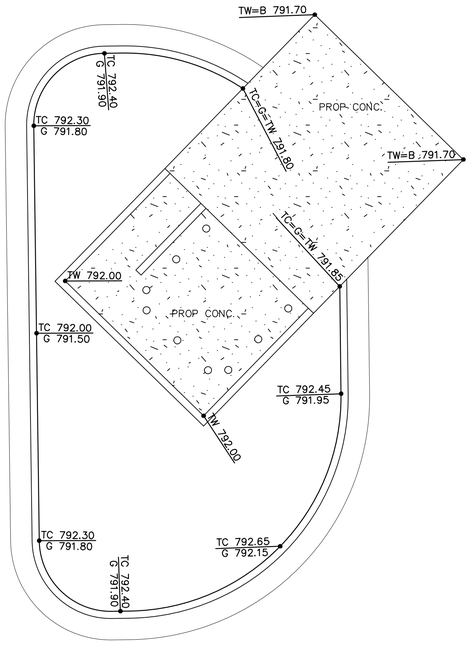
EAST SIDE DRIVE ENTRANCE DETAIL
SCALE: 1" = 10'



WEST DUMPSTER PAD DETAIL
SCALE: 1" = 5'



EAST DUMPSTER PAD DETAIL
SCALE: 1" = 5'

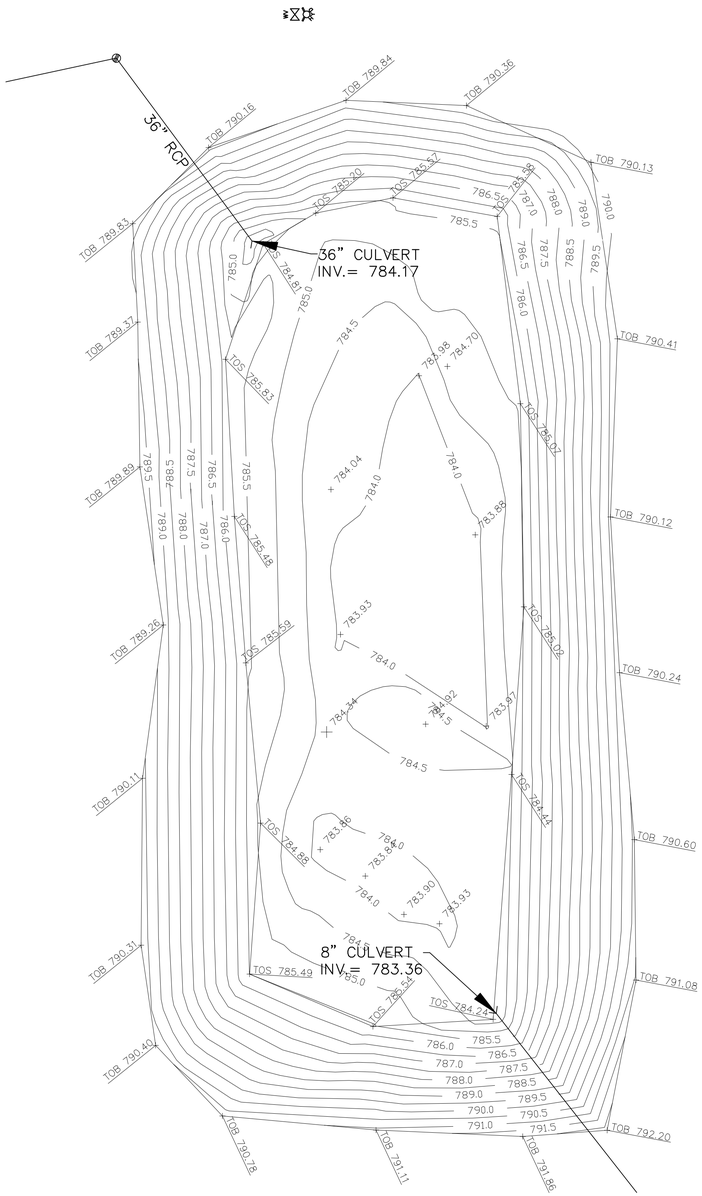


CMS & D
SURVEYING / ENGINEERING
2257 E. BROOMFIELD RD.
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

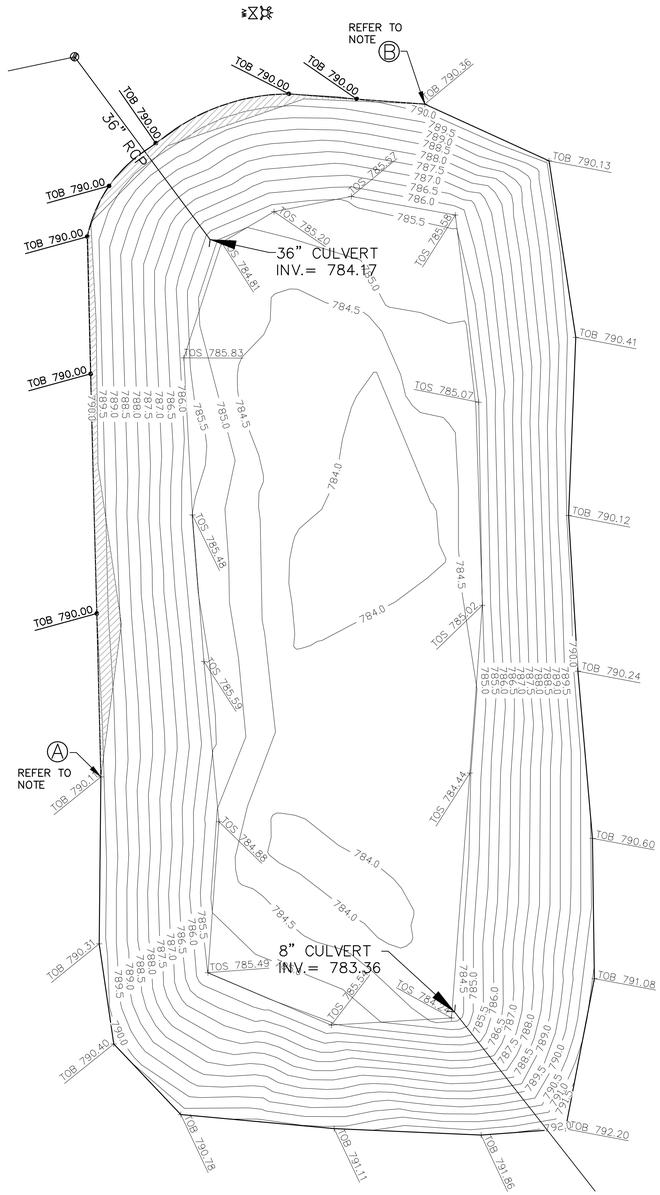
GRADING DETAILS
THE DEN ON BROOMFIELD
UNITS 1 AND 2 OF TALLGRASS COMMONS
SITE CONDOMINIUM, PART OF THE NORTHEAST 1/4
OF SECTION 26, UNION TWP., ISABELLA CO., MICHIGAN

REVISIONS:	SUBMITTALS:	JOB NUMBER:	SCALE
COMMENTS FROM CLIENT 02-23-20	SUBMITTAL TO CLIENT 02-23-20	1810-109	1" = 10'
UNION TOWNSHIP SITE REPORT 1-11-21	SUBMITTAL TO CLIENT 02-23-20	DRAWN BY: BTM	
	SUBMITTAL TO UNION TOWNSHIP PRLIMINARY SITE PLAN 12-23-20	DESIGNED BY: TELB	SHEET NUMBER 6 OF 21
	SUBMITTAL TO UNION TOWNSHIP FINAL SITE PLAN 4-22-21	CHECKED BY: TELB	

EXISTING DETENTION AREA



PROPOSED DETENTION AREA



NOTE:
IN HATCHED AREA BETWEEN POINTS "A" AND "B" THE TOP OF BERM IS TO BE RECONSTRUCTED TO TO AN ELEVATION OF 790.0.

CONTOUR INFORMATION	
ELEVATION	AREA (S.F.)
784.0	2,508
784.5	10,207
785.0	14,364
785.5	17,805
786.0	19,741
786.5	21,555
787.0	23,407
787.5	25,327
788.0	27,290
788.5	29,315
789.0	31,375
789.5	33,500
790.0	35,662

	STORAGE PROVIDED	
ELEVATION	VOLUME (C.F.)	TOTAL (C.F.)
784.0	------	------
784.5	3,178.75	------
785.0	6,142.75	9,321.5
785.5	8,042.25	17,363.75
786.0	9,386.5	26,750.25
786.5	10,324	37,074.25
787.0	11,240.5	48,314.75
787.5	12,183.5	60,498.25
788.0	13,154.25	73,652.5
788.5	14,151.25	87,803.75
789.0	15,172.5	102,976.25
789.5	16,218.75	119,195
790.0	17,290.5	136,485.5

IMERVIOUS AREA NORTH 2 PARCELS= 86468 SQ. FT
PERVIOUS AREA NORTH 2 PARCEL= 12778 SQ. FT
SOUTH 1/2 ENTRY DRIVE IMPERVIOUS AREA= 4248 SQ. FT
SOUTH 1/2 ENTRY DRIVE PERVIOUS AREA= 2832 SQ. FT
VOLUME AT OVERFLOW 790.0= 136,485.5 CU. FT
VOLUME AT 1 FT FREEBOARD 789.0= 102,976.25 CU. FT

TOTAL DEVELOPED AREA = 2.44 ACRES
TOTAL IMPERVIOUS AREA = 2.08 ACRES
TOTAL PERVIOUS AREA = 0.36 ACRES
25 YEAR/24 HOUR REQUIRED DETENTION = 18,062 C.F.
PROVIDED STORMWATER DETENTION WITHIN EXISTING BASIN ALLOTTED FOR UNITS 1 & 2 = 19,928 C.F.

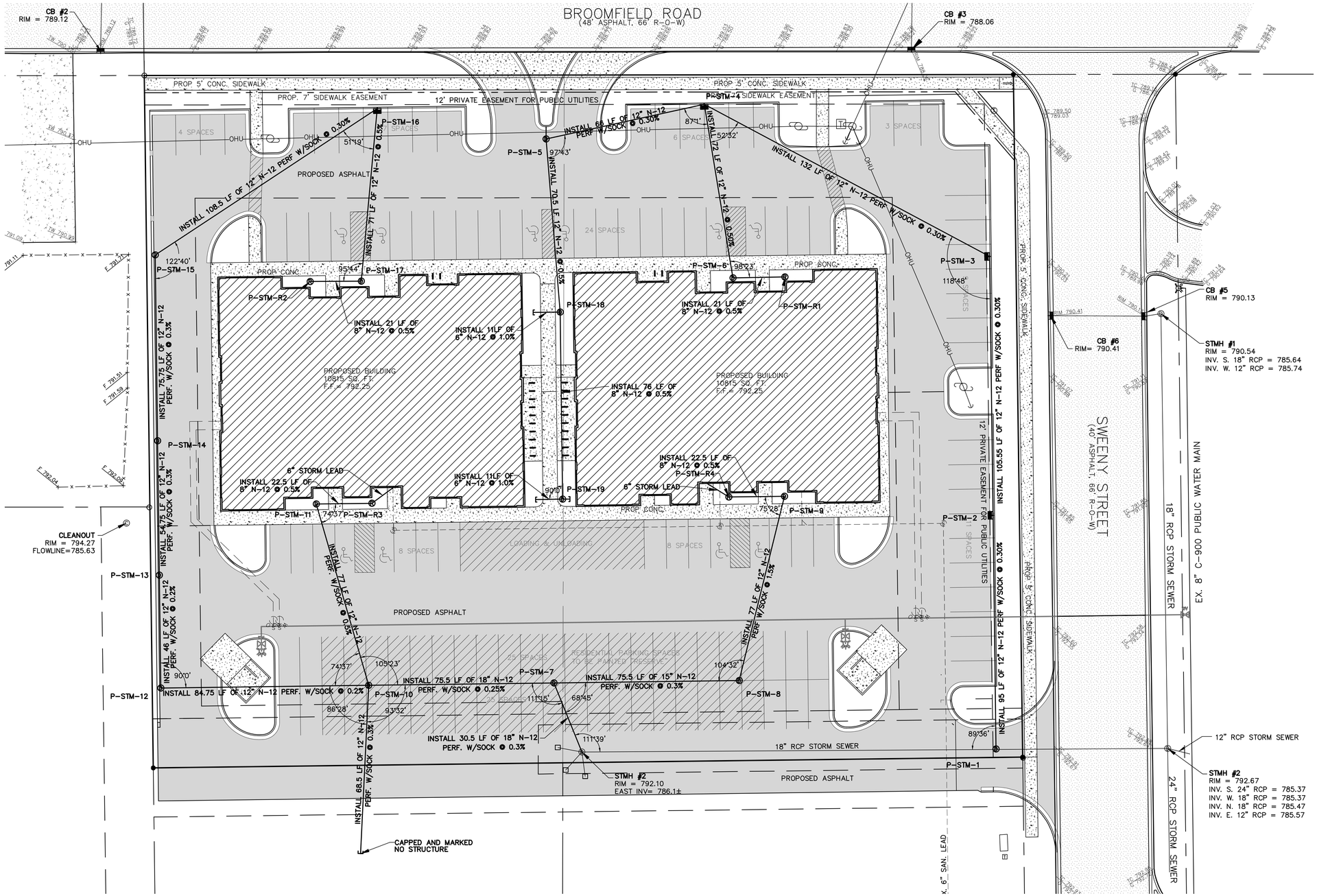
0 10 20 40
1 inch = 20 ft.

CMS & D
SURVEYING / ENGINEERING
2257 E. BROOMFIELD RD.
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

DETENTION AREA DETAIL
THE DEN ON BROOMFIELD
UNITS 1 AND 2 OF TALLGRASS COMMONS
SITE CONDOMINIUM, PART OF THE NORTHEAST 1/4
OF SECTION 26, UNION TWP., ISABELLA CO., MICHIGAN

REVISIONS:	SUBMITTALS:
COMMENTS FROM CLIENT 02-23-20	SUBMITTAL TO CLIENT 02-23-20
UNION TOWNSHIP SITE REPORT 1-11-21	SUBMITTAL TO CLIENT 02-23-20
	SUBMITTAL TO UNION TOWNSHIP PRLIMINARY SITE PLAN 12-23-20
	SUBMITTAL TO UNION TOWNSHIP FINAL SITE PLAN 4-22-21

JOB NUMBER: 1810-109
DRAWN BY: BTM
DESIGNED BY: TELB
CHECKED BY: TELB
SCALE: 1" = 20'
SHEET NUMBER: 7 OF 21



PROPOSED STORM STRUCTURE TABLE

P-STM #1
RIM= 792.73
NORTH INV= 785.75 15" N-12 PERF W/SOCK
EAST INV= 785.6± 18" RCP
WEST INV= 785.6± 18" RCP

P-STM #2
4' DIA. STR. E.J.I.W. 7045 W/TYPE M-2 GRATE
RIM= 791.00
NORTH INV= 786.04 15" N-12 PERF W/SOCK
SOUTH INV= 786.04 15" N-12 PERF W/SOCK

P-STM #3
4' DIA. STR. E.J.I.W. 7045 W/TYPE M-2 GRATE
RIM= 791.00
NORTHWEST INV= 786.36 15" N-12 PERF W/SOCK
SOUTH INV= 786.36 15" N-12 PERF W/SOCK

P-STM #4
4' DIA. STR. E.J.I.W. 7045 W/TYPE M-2 GRATE
RIM= 790.30
SOUTHEAST INV= 786.76 12" N-12 PERF W/SOCK
SOUTH INV= 786.76 12" N-12
WEST INV= 786.76 12" N-12 PERF W/SOCK

P-STM #5
3' DIA STR. W/ 6" CONC. LID E.J.I.W. 1040 W/ TYPE M-1 GRATE
RIM= 789.75
EAST INV= 786.96 12" N-12 PERF W/SOCK
SOUTH INV= 787.06 12" N-12 PERF W/SOCK

P-STM #6
3' DIA. STR. 6" FLAT TOP E.J.I.W. 1040 W/TYPE 02 GRATE
RIM= 791.85
NORTH INV= 787.12 12" N-12 PERF W/SOCK
EAST INV= 787.22 8" N-12 PERF W/SOCK

P-STM #7
5' DIA. STR. E.J.I.W. 1040 W/TYPE M-1 GRATE
RIM= 790.75
WEST INV= 786.34 18" N-12 PERF W/SOCK
SOUTHEAST INV= 786.34 18" N-12 PERF W/SOCK
EAST INV= 786.34 15" N-12 PERF W/SOCK

P-STM #8
4' DIA. STR. E.J.I.W. 1040 W/TYPE M-1 GRATE
RIM= 790.75
NORTHEAST INV= 787.50 12" N-12 PERF W/SOCK
WEST INV= 786.57 15" N-12 PERF W/SOCK

P-STM #9
3' DIA. STR. 6" FLAT TOP E.J.I.W. 1040 W/TYPE 02 GRATE
RIM= 791.85
WEST INV= 788.76 8" N-12 PERF W/SOCK
SOUTHWEST INV= 788.66 12" N-12 PERF W/SOCK

P-STM #10
4' DIA. STR. E.J.I.W. 1040 W/TYPE M-1 GRATE
RIM= 791.95
EAST INV= 786.53 18" N-12 PERF W/SOCK
NORTH-NORTHWEST INV= 786.53 12" N-12 PERF W/SOCK
SOUTH INV= 786.53 12" N-12 PERF W/SOCK
WEST INV= 786.53 18" N-12 PERF W/SOCK

P-STM #11
3' DIA. STR. 6" FLAT TOP E.J.I.W. 1040 W/TYPE 02 GRATE
RIM= 791.85
EAST INV= 787.02 8" N-12 PERF W/SOCK
SOUTH-SOUTHEAST INV= 786.92 12" N-12 PERF W/SOCK

P-STM #12
4' DIA. STR. E.J.I.W. 1040 W/TYPE M-1 GRATE
RIM= 791.90
NORTH INV= 786.70 18" N-12 PERF W/SOCK
EAST INV= 786.70 18" N-12 PERF W/SOCK

P-STM #13
4' DIA. STR. E.J.I.W. 1040 W/TYPE M-1 GRATE
RIM= 791.00
EAST INV= 786.79 18" N-12 PERF W/SOCK
NORTH INV= 786.79 15" N-12 PERF W/SOCK

P-STM #14
4' DIA. STR. E.J.I.W. 1040 W/TYPE M-1 GRATE
RIM= 791.00
SOUTH INV= 786.95 12" N-12 PERF W/SOCK
NORTH INV= 786.95 12" N-12 PERF W/SOCK

P-STM #15
4' DIA. STR. E.J.I.W. 1040 W/TYPE M-1 GRATE
RIM= 791.00
NORTHEAST INV= 787.18 12" N-12 PERF W/SOCK
SOUTH INV= 787.18 15" N-12 PERF W/SOCK

P-STM #16
3' DIA STR. W/ 6" CONC. LID E.J.I.W. 1040 W/ TYPE M-2 GRATE
RIM= 790.30
SOUTHWEST INV= 787.51 12" N-12
SOUTH INV= 787.51 12" N-12 PERF W/SOCK

P-STM #17
3' DIA. STR. 6" FLAT TOP E.J.I.W. 1040 W/TYPE 02 GRATE
RIM= 791.85
NORTH INV= 787.93 12" N-12 PERF W/SOCK
WEST INV= 788.03 8" N-12 PERF W/SOCK

P-STM #18
3' DIA. STR. 6" PLAT TOP E.J.I.W. 1040 W/TYPE 01 GRATE
RIM= 790.55
NORTH INV= 787.41 12" N-12
SOUTH INV= 787.51 8" N-12 PERF W/SOCK
WEST INV= 787.51 6" N-12

P-STM #19
3' DIA. STR. 6" FLAT TOP E.J.I.W. 1040 W/TYPE 01 GRATE
RIM= 791.00
NORTH INV= 787.90 8" N-12
WEST INV= 788.00 6" N-12
EAST INV= 788.00 6" N-12

PROPOSED STORM RISER TABLE

P-STM R#1
RIM= 791.85
WEST INV= 787.33 8" N-12

P-STM R#2
RIM= 791.85
EAST INV= 788.14 8" N-12

P-STM R#3
RIM= 791.85
WEST INV= 787.13 8" N-12
NORTHEAST INV= 787.13 8" N-12

P-STM R#4
RIM= 791.85
EAST INV= 788.87 8" N-12

0 10 20 40
1 inch = 20 ft.

CMS & D
SURVEYING / ENGINEERING
2257 E. BROOMFIELD RD.
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

STORMWATER PLAN
THE DEN ON BROOMFIELD
UNITS 1 AND 2 OF TALLGRASS COMMONS
SITE CONDOMINIUM, PART OF THE NORTHEAST 1/4
OF SECTION 26, UNION TWP., ISABELLA CO., MICHIGAN

REMSIONS:
COMMENTS FROM CLIENT 02-23-20
UNION TOWNSHIP SITE REPORT 1-11-21

SUBMITTALS:
SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO UNION TOWNSHIP
PRLIMINARY SITE PLAN 12-23-20
SUBMITTAL TO UNION TOWNSHIP
FINAL SITE PLAN 4-22-21

JOB NUMBER: 1810-109
DRAWN BY: BTM
DESIGNED BY: TELB
CHECKED BY: TELB

SCALE 1" = 20'
SHEET NUMBER 8 OF 21

BROOMFIELD ROAD
(48' ASPHALT, 66' R-O-W)

CB #2
RIM = 789.12

PROPOSED ELEC. TRANSFORMER PAD PHASE II LOCATION CONTRACTOR TO COORDINATE WITH UTILITY COMPANY FOR INSTALLATION DETAILS.

CB #3
RIM = 788.06

PROP 5' CONC. SIDEWALK

PROP. 7' SIDEWALK EASEMENT

12' PRIVATE EASEMENT FOR PUBLIC UTILITIES

4 SPACES

7 SPACES

6 SPACES

3 SPACES

OHU

50.00'

PROPOSED ASPHALT

50' FRONT YARD SETBACK

24 SPACES

PROP. CONC.

20' SIDE YARD SETBACK

ELEC. SERVICE

20.00'

PROPOSED BUILDING
10815 SQ. FT.
F.F. = 792.25

104 LF OF 2-1/2" DOMESTIC WATER LEAD

110 LF OF 6" FIRE LINE

PROP. GAS

PROP. FIBER/TELE.

9 SPACES

CB #5
RIM = 790.13

CB #6
RIM= 790.41
PROPOSED ELEC. TRANSFORMER PAD PHASE I LOCATION CONTRACTOR TO COORDINATE WITH UTILITY COMPANY FOR INSTALLATION DETAILS.

STMH #1
RIM = 790.54
INV. S. 18" RCP = 785.64
INV. W. 12" RCP = 785.74

SWEENY STREET
(40' ASPHALT, 66' R-O-W)

14-026-20-004-00
JOHN E. JR. & ANN J. TRUST
4532 EAST BROOMFIELD ROAD
MT. PLEASANT, MI, 48858

14-103-00-003-00
NEW GRASS SSA LLC
619 S. MISSION STREET
MT. PLEASANT, MI 48858

18" RCP STORM SEWER

EX. 8" C-900 PUBLIC WATER MAIN

CLEANOUT
RIM = 794.27
FLOWLINE=785.63

INSTALL 116 LF OF 6" SDR-35 @ 1.0% PROP EXTENSION OF PRIVATE SERVICE LEAD

INSTALL 92 LF OF 6" SDR-35 @ 1.0% PROP EXTENSION OF PRIVATE SERVICE LEAD

PROP. SAN. MH

8 SPACES

LOADING & UNLOADING

11 SPACES

50.00'

95 LF OF 2-1/2" DOMESTIC WATER LEAD

95 LF OF 6" FIRE LINE

95 LF OF 6" SDR-35 @ 1.0% PROP EXTENSION OF PRIVATE SERVICE LEAD

50' FRONT YARD SETBACK

PROP. 5' CONC. SIDEWALK

INSTALL 73 LF OF 6" SDR-35 @ 1.0% PROP EXTENSION OF PRIVATE SERVICE LEAD

DIRECTIONAL DRILL
90 LF 8" HDPE
PRIVATE WATER MAIN

INSTALL 8" BY 8" TAPPING SLEEVE VALVE & BOX

14-103-00-007-00
NEW GRASS LLC
619 S. MISSION STREET
MT. PLEASANT, MI 48858

PROPOSED ASPHALT

INSTALL 288.5 LF OF 8" C-900 PRIVATE WATER MAIN

INSTALL VALVE & BOX & HYDRANT

INSTALL VALVE & BOX & HYDRANT

25 SPACES

RESIDENTIAL PARKING SPACES TO BE PAVED "RESERVE"

25' REAR YARD SETBACK

20' SIDE YARD SETBACK

20.00'

25.00'

18" RCP STORM SEWER

12" RCP STORM SEWER

STMH #2
RIM = 792.10
EAST INV= 786.1±

STMH #2
RIM = 792.67
INV. S. 24" RCP = 785.37
INV. W. 18" RCP = 785.37
INV. N. 18" RCP = 785.47
INV. E. 12" RCP = 785.57

PROPOSED ASPHALT

24" RCP STORM SEWER

14-103-00-005-00
NEW GRASS LLC
619 S. MISSION STREET
MT. PLEASANT, MI 48858

EX. 6" SAN. LEAD

0 10 20 40
1 inch = 20 ft.

CMS & D
SURVEYING / ENGINEERING
2257 E. BROOMFIELD RD.
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

SITE UTILITY PLAN
THE DEN ON BROOMFIELD
UNITS 1 AND 2 OF TALLGRASS COMMONS
SITE CONDOMINIUM, PART OF THE NORTHEAST 1/4
OF SECTION 26, UNION TWP., ISABELLA CO., MICHIGAN

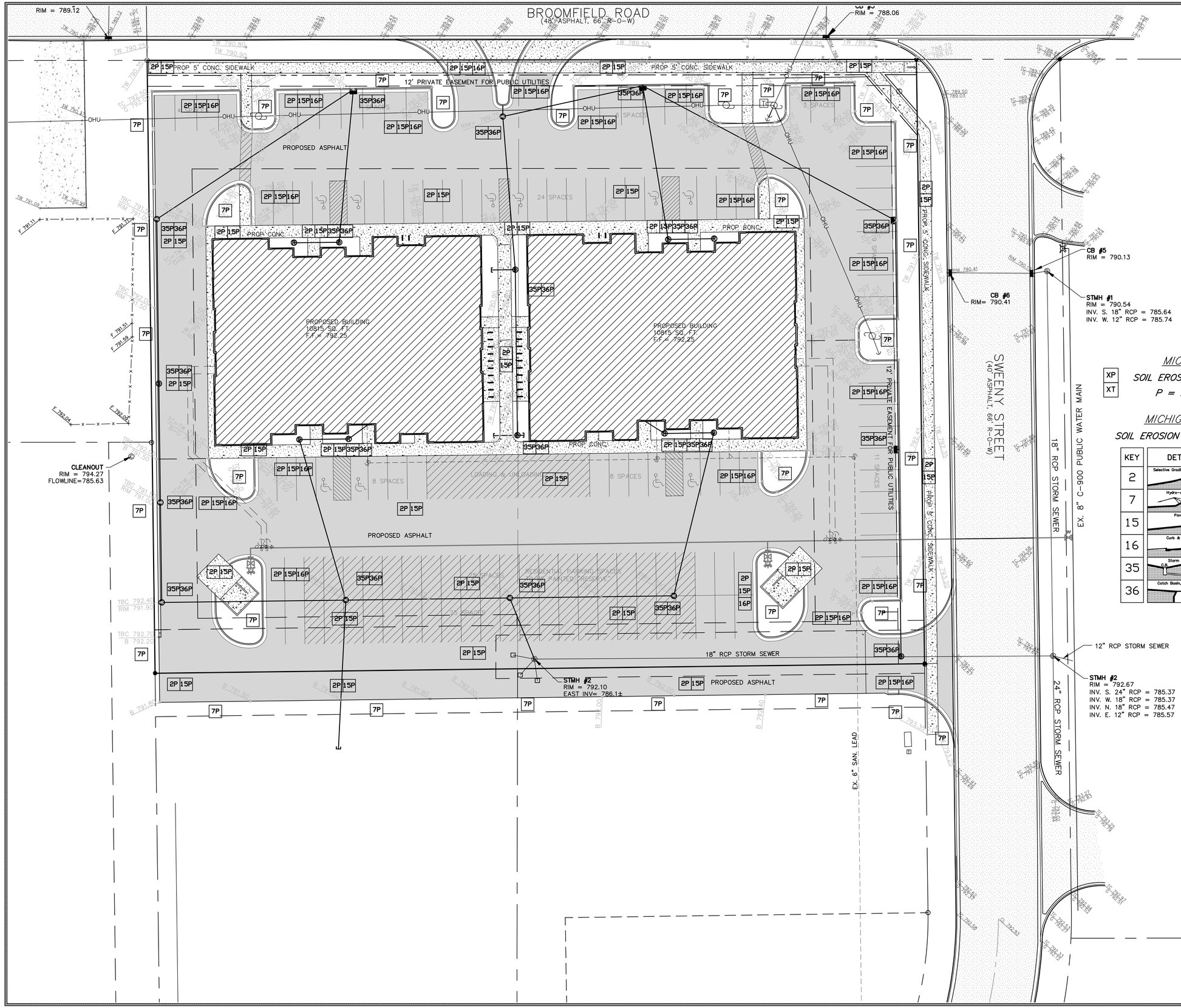
REVISIONS:
COMMENTS FROM CLIENT 02-23-20
UNION TOWNSHIP SITE REPORT 1-11-21

SUBMITTALS:
SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO UNION TOWNSHIP PRILIMINARY SITE PLAN 12-23-20
SUBMITTAL TO UNION TOWNSHIP FINAL SITE PLAN 4-22-21

JOB NUMBER: 1810-109
DRAWN BY: BTM
DESIGNED BY: N/A
CHECKED BY: TELB

SCALE: 1" = 20'

SHEET NUMBER 9 OF 21



MICHIGAN UNIFIED KEYING SYSTEM

SOIL EROSION & SEDIMENTATION CONTROL MEASURES

XP XT

P = PERMANENT T = TEMPORARY

MICHIGAN UNIFIED KEYING SYSTEM

SOIL EROSION & SEDIMENTATION CONTROL MEASURES

KEY	DETAIL	CHARACTERISTICS
2	Selective Grading & Shaping	Water can be diverted to minimize erosion Flatter slopes ease erosion problems
7	Hydro-seeding	Effective on large areas Mulch tacking agent used to provide immediate protection until grass is rooted Should include prepared topsoil bed
15	Paving	Protects areas which cannot otherwise be protected, but increases runoff volume and velocity Irregular surface will help slow velocity
16	Curb & Gutter	Keeps high velocity runoff on paved areas from leaving paved surface Collects and conducts runoff to enclosed drainage system or prepared drainagway
35	Storm Sewer C.B. C.B.	System removes collected runoff from site, particularly from paved areas Can accept large concentrations of runoff Conducts runoff to municipal sewer system or stabilized outfall location Use catch basins to collect sediment
36	Catch Basin, Drain Inlet	Collects high velocity concentrated runoff May use filter cloth over inlet

CMS & D
SURVEYING / ENGINEERING
2257 E. BROOMFIELD RD.
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

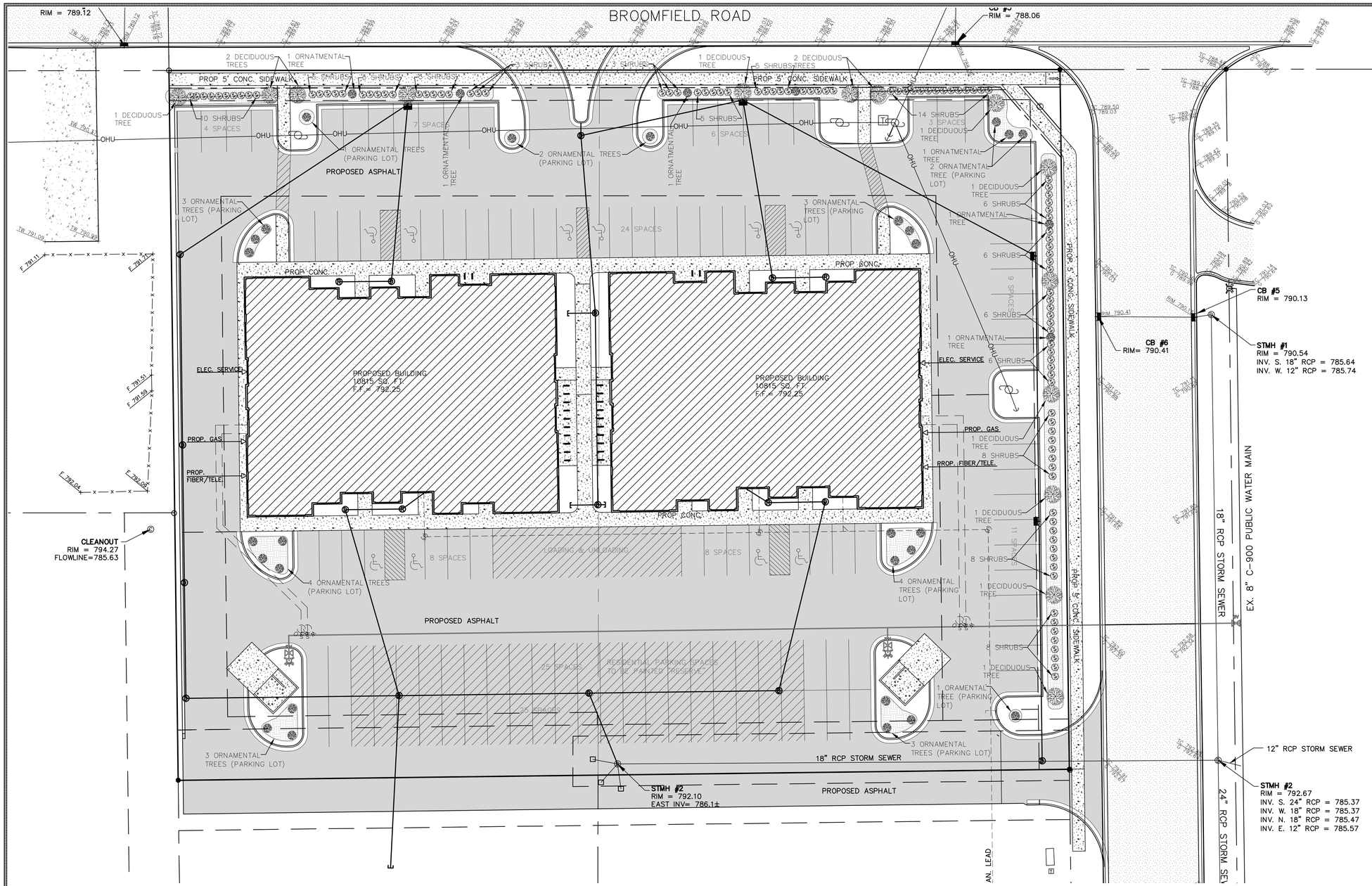
SOIL EROSION PLAN
THE DEN ON BROOMFIELD
UNITS 1 AND 2 OF TALLGRASS COMMONS
SITE CONDOMINIUM, PART OF THE NORTHEAST 1/4
OF SECTION 26, UNION TWP., ISABELLA CO., MICHIGAN

REVISIONS:
COMMENTS FROM CLIENT 02-23-20
UNION TOWNSHIP SITE REPORT 1-11-21

SUBMITTALS:
SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO UNION TOWNSHIP
PRLIMINARY SITE PLAN 12-23-20
SUBMITTAL TO UNION TOWNSHIP
FINAL SITE PLAN 4-22-21

JOB NUMBER: 1810-109
DRAWN BY: BTM
DESIGNED BY: TELB
CHECKED BY: TELB

SCALE 1" = 20'
SHEET NUMBER 10 OF 21



PROP DECIDUOUS TREE WITH A MIN. CALIPER OF 2.5 INCHES AND A MIN. HEIGHT OF 4 FEET TO FIRST BRANCH.

PROP ORNATMENTAL TREE – MIN. CALIPER OF 2.0 INCHES & A MIN. HEIGHT OF 4 FEET TO FIRST BRANCH.

PROP SHRUB– MIN. HEIGHT OF 3 FEET AND A MIN. SPREAD OF 2 FEET.

NOTE: ALL OTHER SOFT AREAS NOT DESIGNATED AS COVERED SHALL BE GRASS COVERED.

= TREE COVER

STREET PLANTINGS – BROOMFIELD ROAD

2 DECIDUOUS TREES
2 ORNAMENTAL TREES
26 SHRUBS

STREET PLANTINGS – SWEENY STREET

6 DECIDUOUS TREES
3 ORNAMENTAL TREES
48 SHRUBS

PARKING LOT PLANTING
TOTAL PLANTINGS = 130/5 = 26 TREES

26 ORNAMENTAL TREES

0 10 20 40
1 inch = 20 ft.

CMS & D
SURVEYING / ENGINEERING
2257 E. BROOMFIELD RD.
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

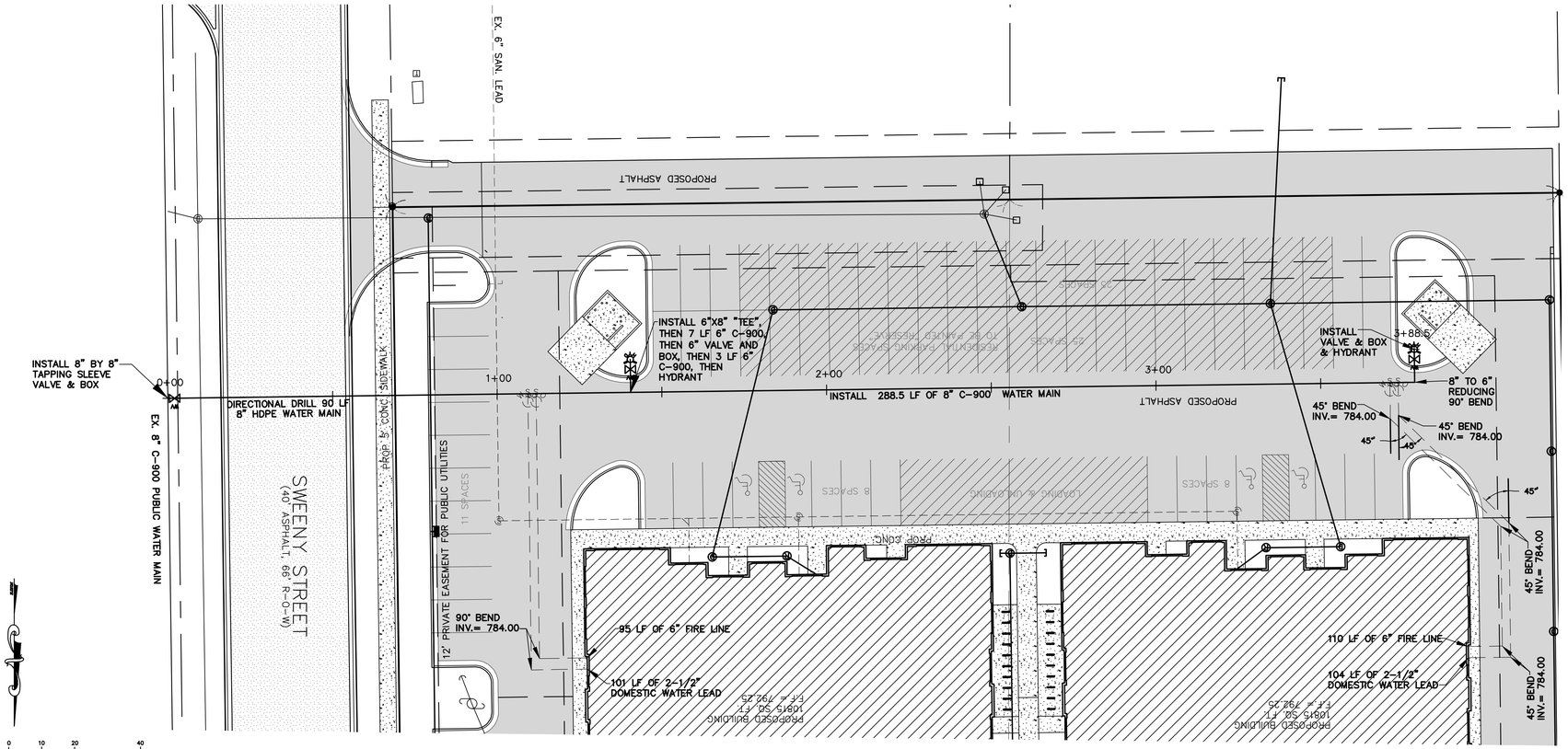
LANDSCAPING PLAN
THE DEN ON BROOMFIELD
UNITS 1 AND 2 OF TALLGRASS COMMONS
SITE CONDOMINIUM, PART OF THE NORTHEAST 1/4
OF SECTION 26, UNION TWP., ISABELLA CO., MICHIGAN

REVISIONS:
COMMENTS FROM CLIENT 02-23-20
UNION TOWNSHIP SITE REPORT 1-11-21

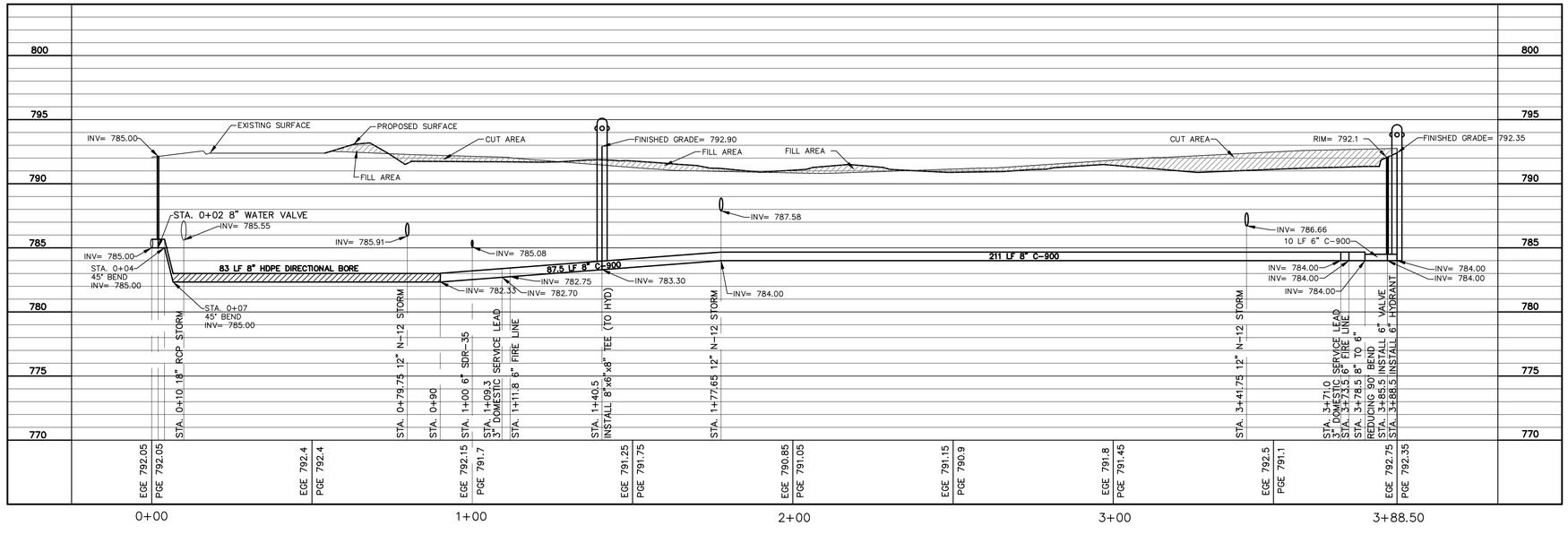
SUBMITTALS:
SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO UNION TOWNSHIP PRELIMINARY SITE PLAN 12-23-20
SUBMITTAL TO UNION TOWNSHIP FINAL SITE PLAN 4-22-21

JOB NUMBER: 1810-109
DRAWN BY: BTM
DESIGNED BY: TELB
CHECKED BY: TELB

SCALE: 1" = 20'
SHEET NUMBER: 11 OF 21



PROFILE SCALE: 1" = 20' HORIZONTAL
1" = 5' VERTICAL



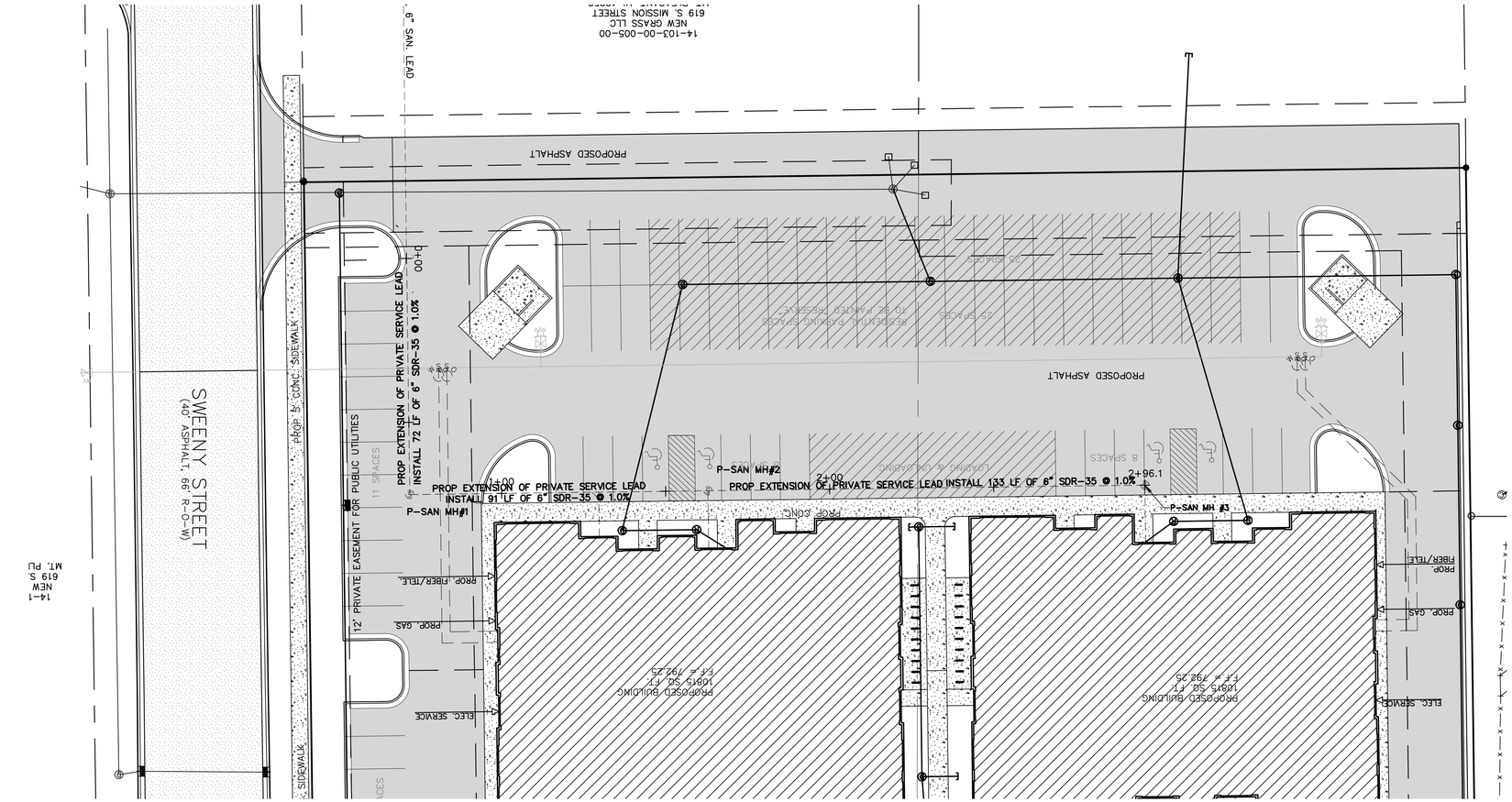
CMS & D
SURVEYING / ENGINEERING
2257 E. BROOMFIELD RD.
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

WATERMAIN PLAN & PROFILE
THE DEN ON BROOMFIELD
UNITS 1 AND 2 OF TALLGRASS COMMONS
SITE CONDOMINIUM, PART OF THE NORTHEAST 1/4
OF SECTION 26, UNION TWP., ISABELLA CO., MICHIGAN

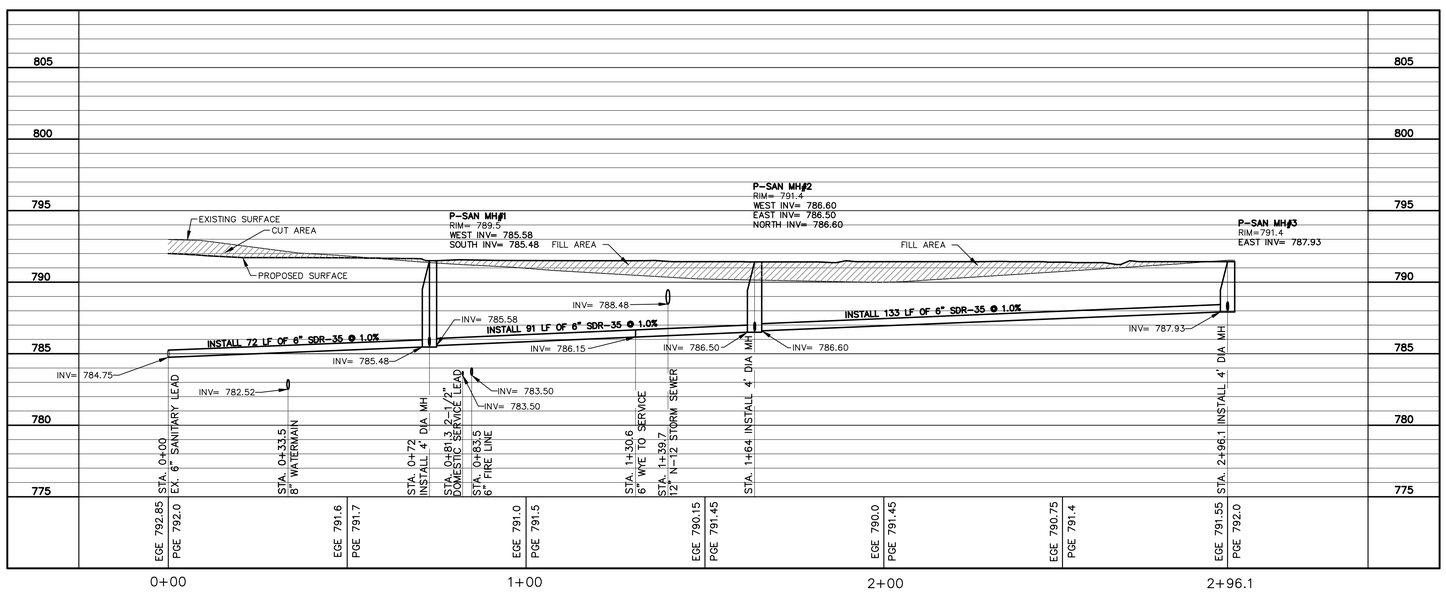
REVISIONS:
COMMENTS FROM CLIENT 02-23-20
UNION TOWNSHIP SITE REPORT 1-11-21

SUBMITTALS:
SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO UNION TOWNSHIP PRELIMINARY SITE PLAN 12-23-20
SUBMITTAL TO UNION TOWNSHIP FINAL SITE PLAN 4-22-21

JOB NUMBER: 1810-109
DRAWN BY: BTM
DESIGNED BY: TELB
CHECKED BY: TELB
SCALE: 1" = 20'
SHEET NUMBER: 12 OF 21



PROFILE SCALE: 1" = 20' HORIZONTAL
1" = 5' VERTICAL



CMS & D
SURVEYING / ENGINEERING
2257 E. BROOMFIELD RD.
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

SANITARY SEWER PLAN & PROFILE

THE DEN ON BROOMFIELD

UNITS 1 AND 2 OF TALLGRASS COMMONS
SITE CONDOMINIUM, PART OF THE NORTHEAST 1/4
OF SECTION 26, UNION TWP., ISABELLA CO., MICHIGAN

REVISIONS:
COMMENTS FROM CLIENT 02-23-20
UNION TOWNSHIP SITE REPORT 1-11-21

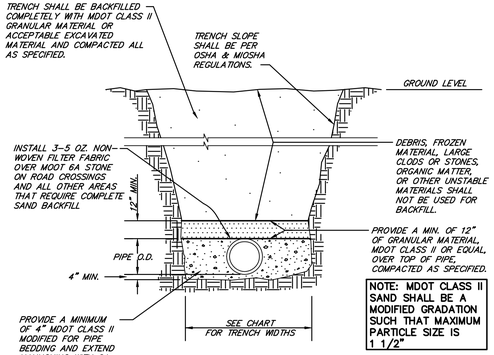
SUBMITTALS:
SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO UNION TOWNSHIP PRLIMINARY SITE PLAN 12-23-20
SUBMITTAL TO UNION TOWNSHIP FINAL SITE PLAN 4-22-21

JOB NUMBER: 1810-109
DRAWN BY: BTM
DESIGNED BY: TELB
CHECKED BY: TELB

SCALE: 1" = 20'

SHEET NUMBER: 13 OF 21

099

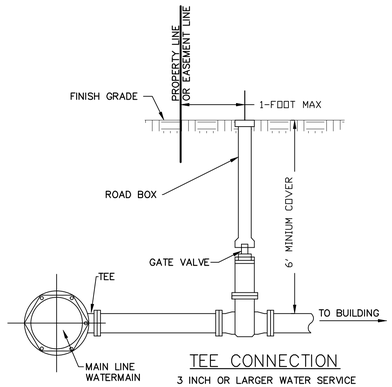


P.V.C. PIPE TRENCH DETAIL

NOT TO SCALE

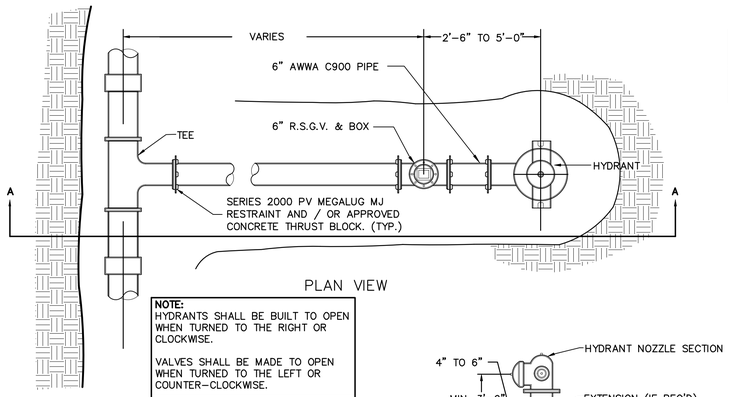
TRENCH WIDTH CHART

PIPE SIZE	MINIMUM	MAXIMUM
8" & 10"	24"	30"
12" & 15"	30"	36"
18"	34"	40"
21"	38"	42"
24"	42"	46"
27"	45"	49"
30"	49"	53"
36"	56"	60"
LARGER THAN 36"	I.D. +20"	I.D. +24"



TEE CONNECTION

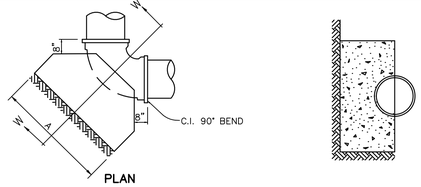
3 INCH OR LARGER WATER SERVICE (INSTALLATION BY CONTRACTOR)



TYPICAL HYDRANT CONNECTION

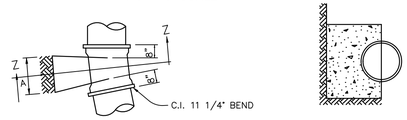
NOT TO SCALE

PIPE SIZE	90° BEND OR TEE					45° BEND					22 1/2° BEND					11 1/4° BEND					PLUG				
	A	B	C		Q	A	B	C		Q	A	B	C		Q	A	B	C		Q	A	B	C		Q
6",8" & 10"	3'-0"	2'-0"	1'-3"		0.3	2'-0"	1'-6"	1'-3"		0.1	1'-6"	1'-0"	1'-3"		0.1	1'-0"	1'-0"	1'-3"		0.1	2'-0"	2'-0"	1'-6"		0.2
12"	3'-0"	2'-6"	1'-6"		0.4	2'-0"	2'-0"	1'-6"		0.2	2'-0"	1'-0"	1'-6"		0.1	1'-0"	1'-0"	1'-6"		0.1	2'-0"	2'-6"	1'-6"		0.3



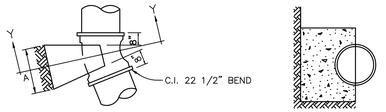
DETAIL OF BLOCK FOR 90° BEND OR TEE

Q = MIN. CU. YD. CONCRETE PER BLOCK
NOT TO SCALE



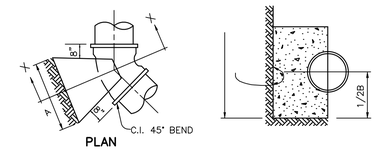
DETAIL OF BLOCK FOR 11 1/4° BEND

Q = MIN. CU. YD. CONCRETE PER BLOCK
NOT TO SCALE



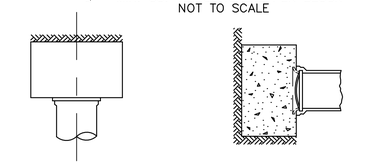
DETAIL OF BLOCK FOR 22 1/2° BEND

Q = MIN. CU. YD. CONCRETE PER BLOCK
NOT TO SCALE



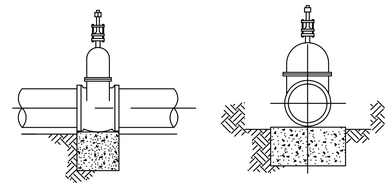
DETAIL OF BLOCK FOR 45° BEND

Q = MIN. CU. YD. CONCRETE PER BLOCK
NOT TO SCALE



DETAIL OF BLOCK FOR PLUG

Q = MIN. CU. YD. CONCRETE PER BLOCK
NOT TO SCALE

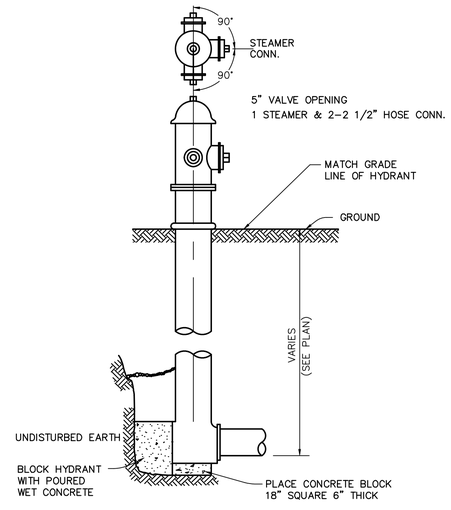


DETAIL OF BLOCK FOR GATE VALVES

NOT TO SCALE

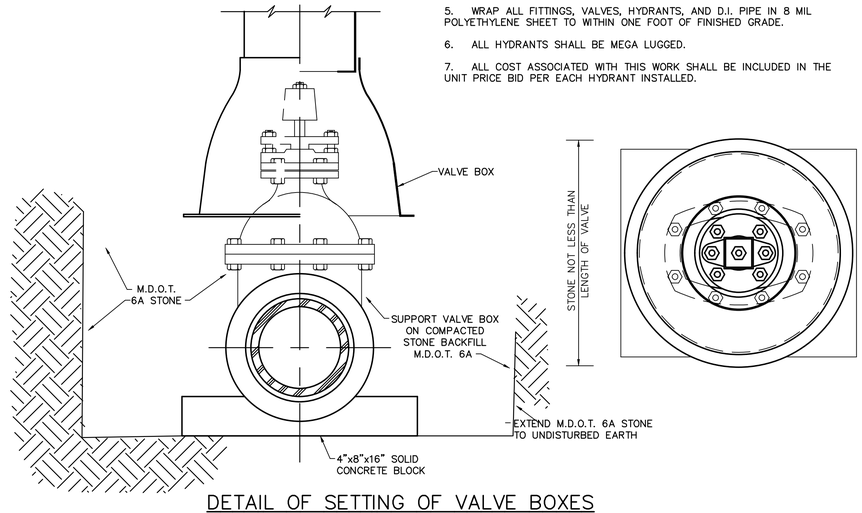
NOTES:

1. THE CONCRETE USED FOR BLOCKING SHALL HAVE A MINIMUM COMPERSSIVE STRENGTH OF 3000 PSI IN 28 DAYS.
2. THE CONTRACTOR SHALL SECURE ALL VERTICAL BENDS WITH A MINIMUM OF 2/3/4 " ANCHOR RODS FITTING EITHER CONCRETE BLOCK, WELDED STEEL PIPE SLEEVE OR COLLARS. METHOD USED SHALL BE DETERMINED BY THE ENGINEER.
3. ALL BENDS SHALL BE MECHANICAL JOINT.
4. ALL FERROUS PARTS SHALL RECEIVE A 10 MIL (DMT) COATING OF COAL TAR EPOXY.
5. WRAP ALL FITTINGS, VALVES, HYDRANTS, AND D.I. PIPE IN 8 MIL POLYETHYLENE SHEET TO WITHIN ONE FOOT OF FINISHED GRADE.
6. ALL HYDRANTS SHALL BE MEGA LUGGED.
7. ALL COST ASSOCIATED WITH THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID PER EACH HYDRANT INSTALLED.



DETAIL OF SETTING HYDRANT

NOT TO SCALE



DETAIL OF SETTING OF VALVE BOXES

NOT TO SCALE

CMS & D
SURVEYING / ENGINEERING
2257 E. BROOMFIELD RD.
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

WATERMAIN DETAILS
THE DEN ON BROOMFIELD

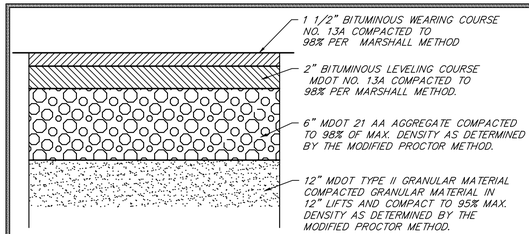
UNITS 1 AND 2 OF TALLGRASS COMMONS
SITE CONDOMINIUM, PART OF THE NORTHEAST 1/4
OF SECTION 26, UNION TWP., ISABELLA CO., MICHIGAN

REVISIONS:
COMMENTS FROM CLIENT 02-23-20
UNION TOWNSHIP SITE REPORT 1-11-21

SUBMITTALS:
SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO CLIENT 02-23-20
SUBMITTAL TO UNION TOWNSHIP PRLIMINARY SITE PLAN 12-23-20
SUBMITTAL TO UNION TOWNSHIP FINAL SITE PLAN 4-22-21

JOB NUMBER: 1810-109
DRAWN BY: BTM
DESIGNED BY: N/A
CHECKED BY: TELB

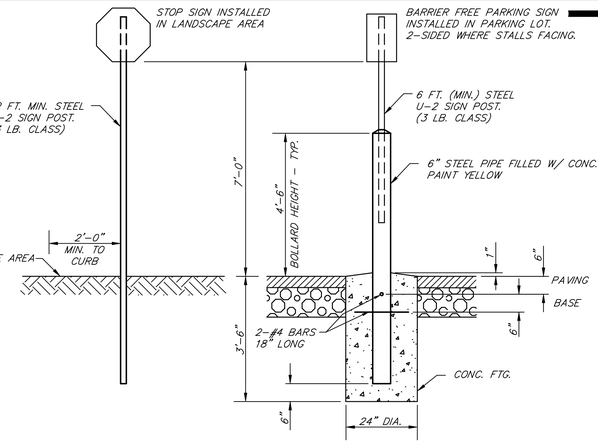
SCALE: N/A
SHEET NUMBER: 14 OF 21



NOTE: COMPACTION TESTS ARE REQUIRED. RESULTS SHALL BE SUBMITTED TO OWNER PRIOR TO FINAL ACCEPTANCE OF SUB-BASE, BASE AND ASPHALT MATERIALS.

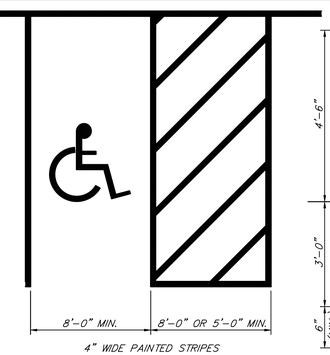
PARKING LOT ASPHALT PAVEMENT CROSS-SECTION

NOT TO SCALE



PARKING LOT SIGN POST DETAILS

NOT TO SCALE

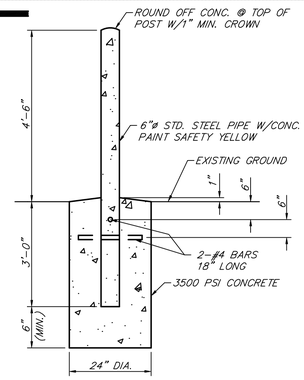


4" WIDE PAINTED STRIPES

PAINT FOR PARKING SLOTS, ARROWS, AND ISLANDS SHALL BE MDOT APPROVED TRAFFIC MARKING PAINT

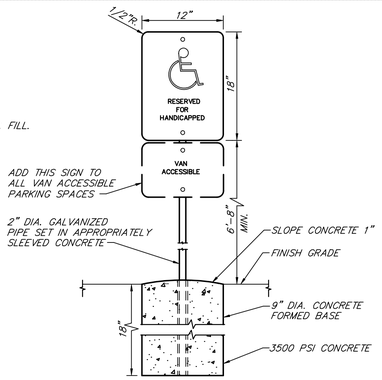
BARRIER FREE PARKING SPACES

NOT TO SCALE



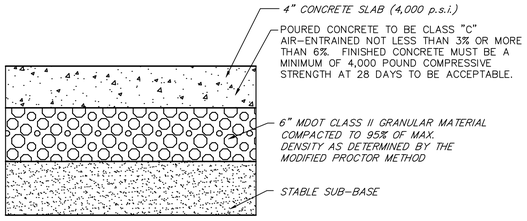
BOLLARD DETAIL

NOT TO SCALE



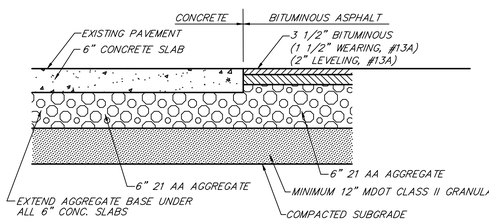
TYP. BARRIER FREE PARKING SIGN

NOT TO SCALE



CONCRETE SIDEWALK CROSS-SECTION

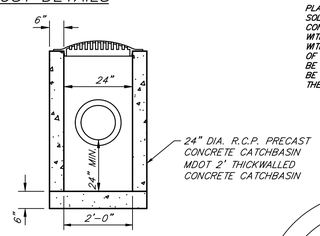
NOT TO SCALE



NOTE: ALL 6" CONC. SLABS TO BE REINFORCED W/ 6x6 W2.9 x W2.9 WWF

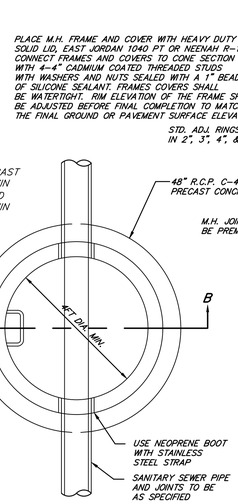
TYPICAL 6" CONCRETE SLAB CROSS-SECTION

NOT TO SCALE



2' DIA. CATCH BASIN DETAIL

NOT TO SCALE

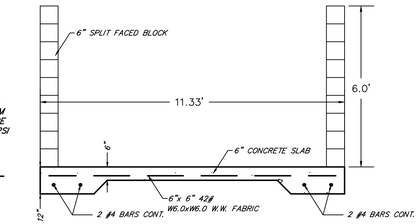


PLAN
STANDARD MANHOLE

NOTE:
MANHOLE STEPS SHALL BE ORIENTATED AT 45°TO THE MAIN SEWER WITH A MAXIMUM OF 24" CLEAR DISTANCE ABOVE THE MANHOLE FLOOR.

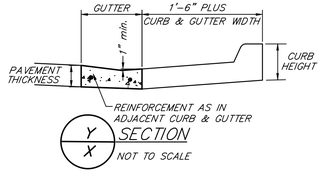
SECTION B-B

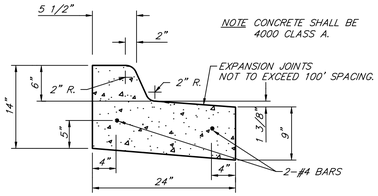
NOTE:
REFER TO SHEETS 5 & 9 FOR DUMPSTER PAD HORIZONTAL AND GRADING DETAILS



DUMPSTER DETAIL

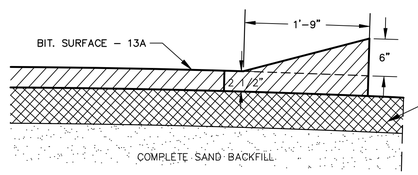
NOT TO SCALE





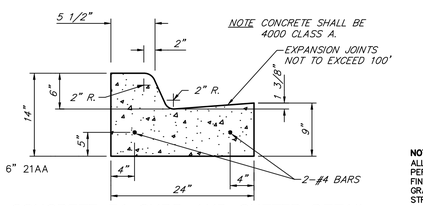
F4 CONCRETE CURB AND GUTTER DETAIL
REVERSE PAN

NOT TO SCALE



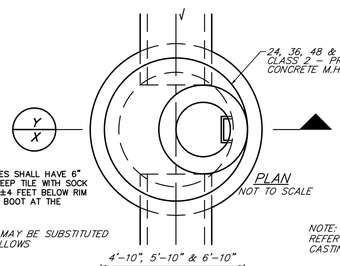
PROPOSED ASPHALT CURB DETAIL

NOT TO SCALE

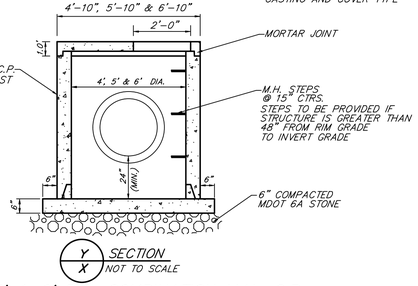


CONCRETE F4 CURB AND GUTTER DETAIL
REGULAR PAN

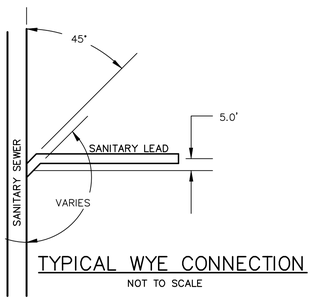
NOTE:
ALL STRUCTURES SHALL HAVE 6" PERFERATED WEEP TILE WITH SOCK FINGER DRAIN ±4 FEET BELOW RIM GRADE WITH A BOOT AT THE STRUCTURE.



NOTE:
REFER TO SITE PLAN FOR CASTING AND COVER TYPE

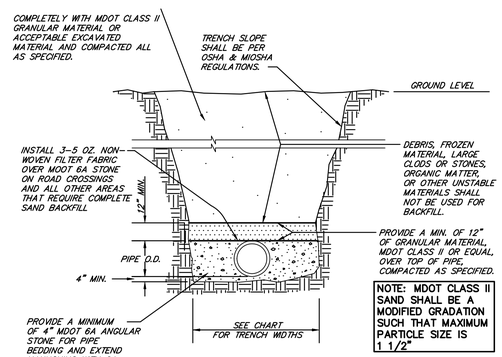


4', 5' & 6' DIA. COMBINATION M.H.-C.B.



TYPICAL WYE CONNECTION

NOT TO SCALE



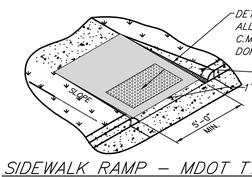
NOTE: MDOT CLASS II SAND SHALL BE A MODIFIED GRADATION SUCH THAT MAXIMUM PARTICLE SIZE IS 1 1/2"

P.V.C. PIPE TRENCH DETAIL

NOT TO SCALE

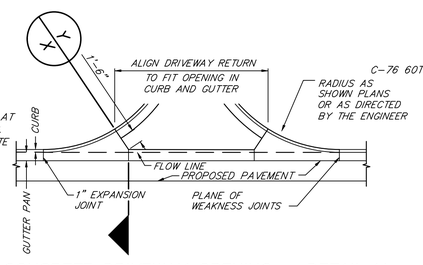
TRENCH WIDTH CHART

PIPE SIZE	MINIMUM	MAXIMUM
8" & 10"	24"	30"
12" & 15"	30"	36"
18"	34"	40"
21"	38"	42"
24"	42"	46"
27"	45"	49"
30"	49"	53"
36"	56"	60"
LARGER THAN 36"	I.D. +20"	I.D. +24"



SIDEWALK RAMP - MDOT TYPE I R-28

NOT TO SCALE



CONCRETE DRIVEWAY OPENING - DETAIL M

NOT TO SCALE

CMS & D
SURVEYING / ENGINEERING
2257 E. BROOMFIELD RD.
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

CONSTRUCTION DETAILS
THE DEN ON BROOMFIELD

UNITS 1 AND 2 OF TALLGRASS COMMONS
SITE CONDOMINIUM, PART OF THE NORTHEAST 1/4
OF SECTION 26, UNION TWP., ISABELLA CO., MICHIGAN

REVISIONS:	SUBMITTALS:	JOB NUMBER:	SCALE
COMMENTS FROM CLIENT 02-23-20	SUBMITTAL TO CLIENT 02-23-20	1810-109	N/A
UNION TOWNSHIP SITE REPORT 1-11-21	SUBMITTAL TO CLIENT 02-23-20	DRAWN BY: BTM	
	SUBMITTAL TO UNION TOWNSHIP PRILIMINARY SITE PLAN 12-23-20	DESIGNED BY: N/A	SHEET NUMBER
	SUBMITTAL TO UNION TOWNSHIP FINAL SITE PLAN 4-22-21	CHECKED BY: TELB	15 OF 21

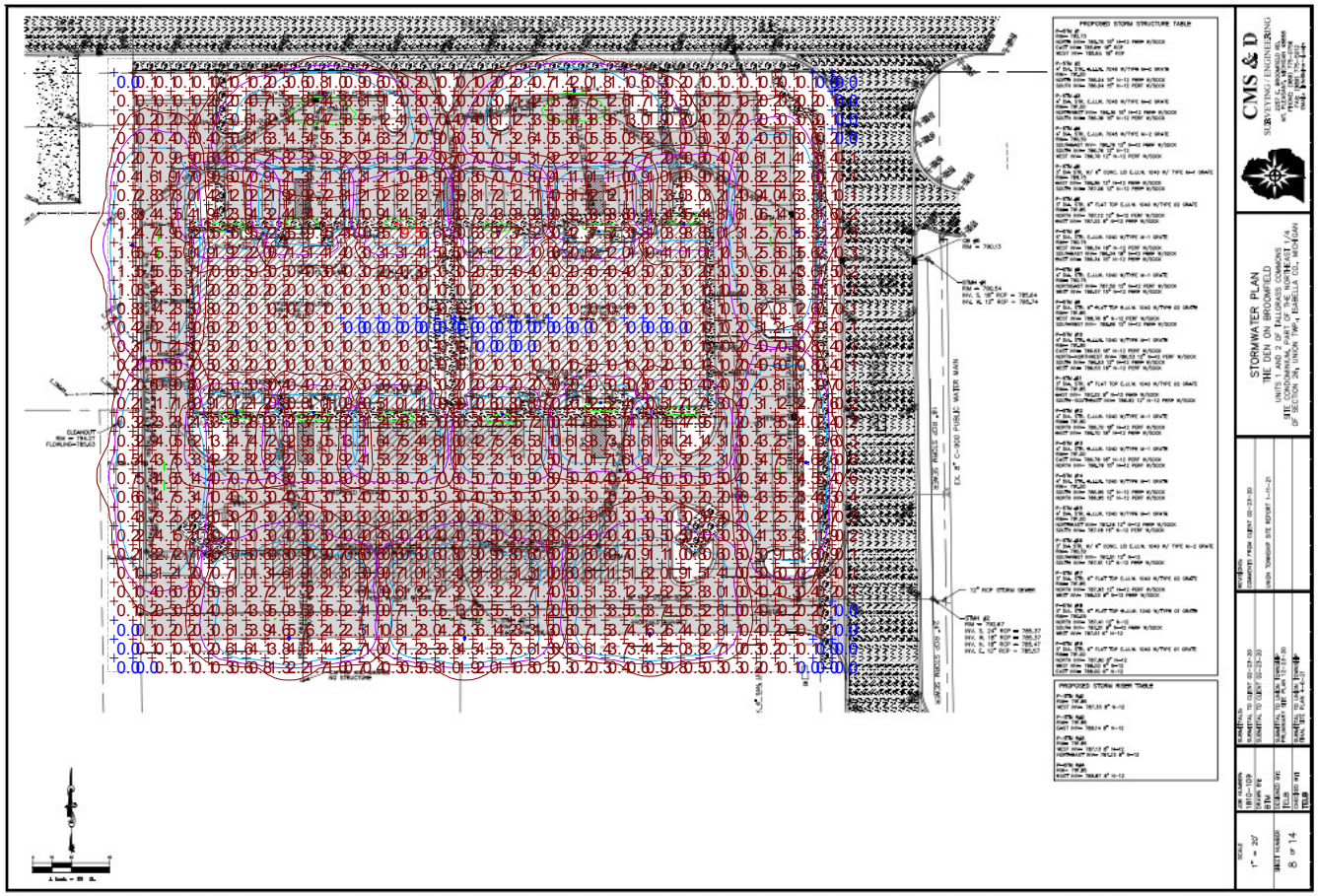
101

Schedule

Symbol	Label	Image	QTY	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens per Lamp	Lumen Multiplier	LLF	Wattage	Efficiency	Distribution	Polar Plot	Notes
	A		4	Cree Inc	OSQL-B-22L-30K7-2M-Ux-xx-xx-xxxx-w_OSQ-BLSLF CONFIGURED FROM OSQ-A-xx-2ME-U--57K-UL-xxxxx w/OSQ-BLSLF	CONFIGURED FROM Cree OSQ Series Area Luminaire, Type II Medium w/ Backlight Shield, U Input Power Designator, 5700K.	MDA	1	OSQL-B-22L-30K7-2M-Ux-xx-xx-xxxx-w_OSQ-BLSLF_CONFIGURED.IES	15899	1	0.9	132	100%			
	B		2	Cree Inc	OSQL-B-22L-30K7-3M-Ux-xx-xx-xxxx-w_OSQ-BLSLF CONFIGURED FROM OSQ-A-xx-3ME-U-57K-UL-xxxxx w/OSQ-BLSLF	CONFIGURED FROM Cree OSQ Series Area Luminaire, Type III Medium w/ Backlight Shield, U Input Power Designator, 5700K	MDA	1	OSQL-B-22L-30K7-3M-Ux-xx-xx-xxxx-w_OSQ-BLSLF_CONFIGURED.ies	16299	1	0.9	132	100%			
	C		3	Cree Inc	OSQL-B-22L-30K7-4M-Ux-xx-xx-xxxx-w_OSQ-BLSLF CONFIGURED FROM OSQ-A-xx-4ME-U--57K-UL-xxxxx w/OSQ-BLSLF	CONFIGURED FROM Cree OSQ Series Area Luminaire, Type IV Medium w/ Backlight Shield, U Input Power Designator, 5700K	MDA	1	OSQL-B-22L-30K7-4M-Ux-xx-xx-xxxx-w_OSQ-BLSLF_CONFIGURED.IES	15899	1	0.9	132	100%			
	D		12	Cree Lighting	XSPW-B-WM-4ME-6L-30K-UL-xxxx CONFIGURED FROM XSPW-B-WM-4ME-8L-40K-UL-xxxx	CONFIGURED FROM XSPW Version B, Wall Mount, Type 4ME Distribution, 8L Lumen Package, 4000K, 120-277V	(4) MDA SA 1400 in a single row	1	XSPW-B-WM-4ME-6L-30K-UL_CONFIGURED.ies	6100	1	0.9	51	100%			

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #2	+	1.6 fc	9.5 fc	0.0 fc	N/A	N/A



Plan View

Scale - 1" = 100ft

VISUAL

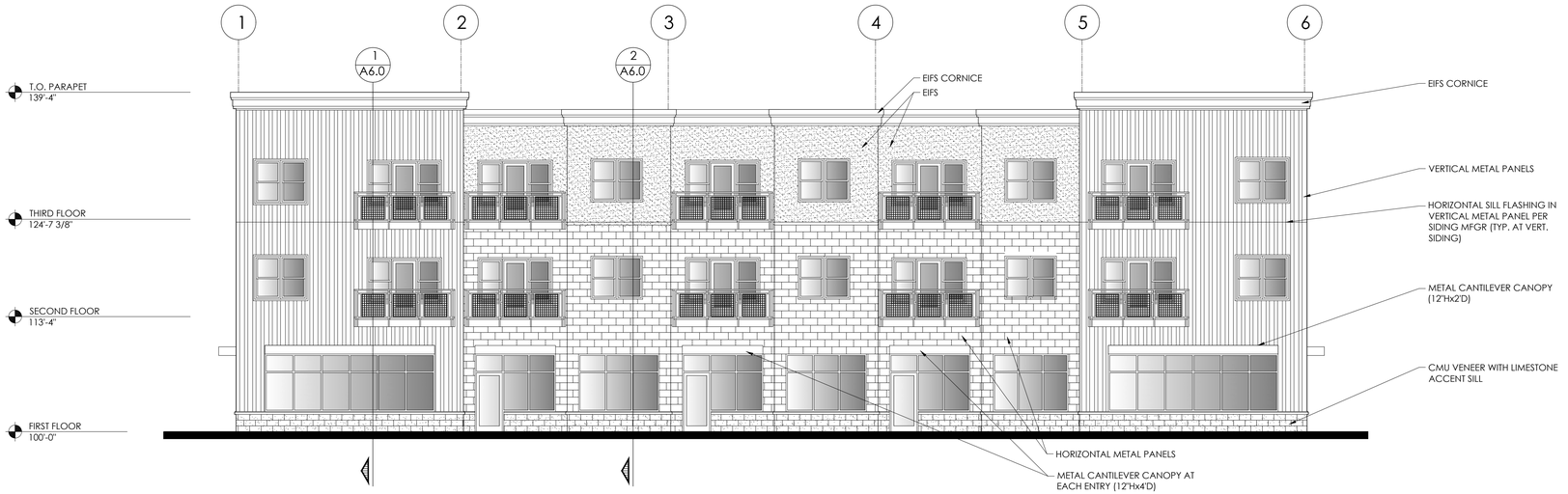
...The Den
Poles @ 22' with base
wall packs @ 12' Height

Designer

Date
04/23/2021
Scale
Not to Scale
Drawing No.

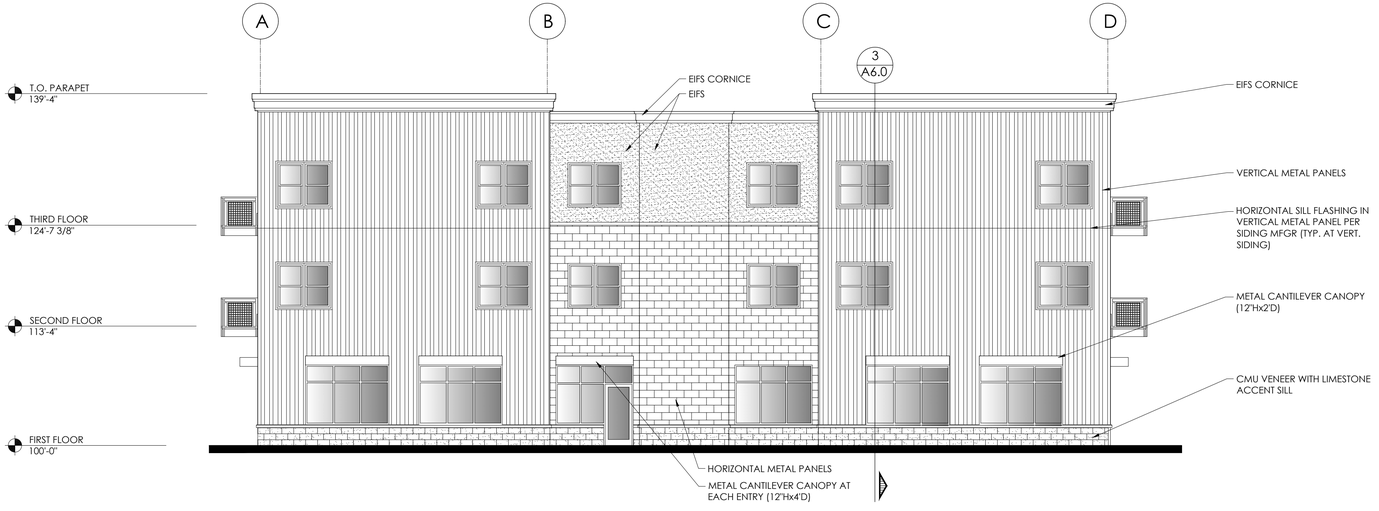
Summary

1 of 1



SOUTH ELEVATION

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



WEST ELEVATION

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

© COPYRIGHT 2021
CASE ARCHITECTURE, INC.

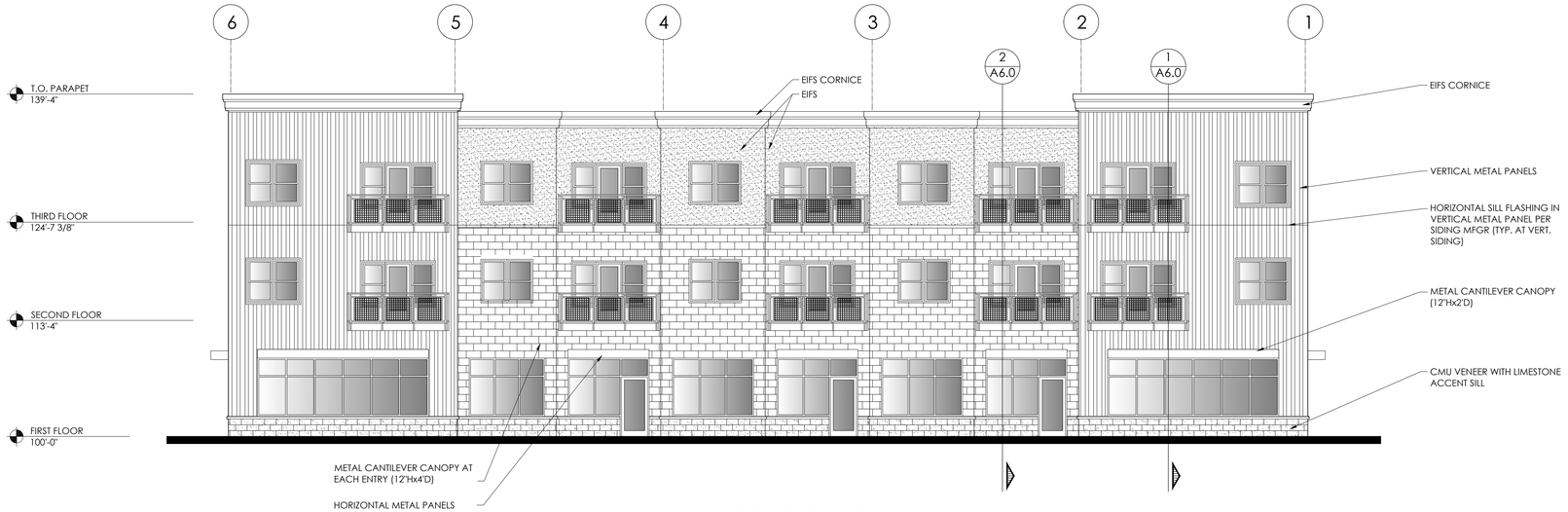
DATE	ISSUED FOR:

case architecture
ARCHITECTURE • PASSION • INTEGRITY
282 S. MAIN • FREELAND, MI • 989.695.9707

PROJECT:
NEW FACILITY FOR:
THE DEN ON BROOMFIELD
UNION TOWNSHIP, MICHIGAN

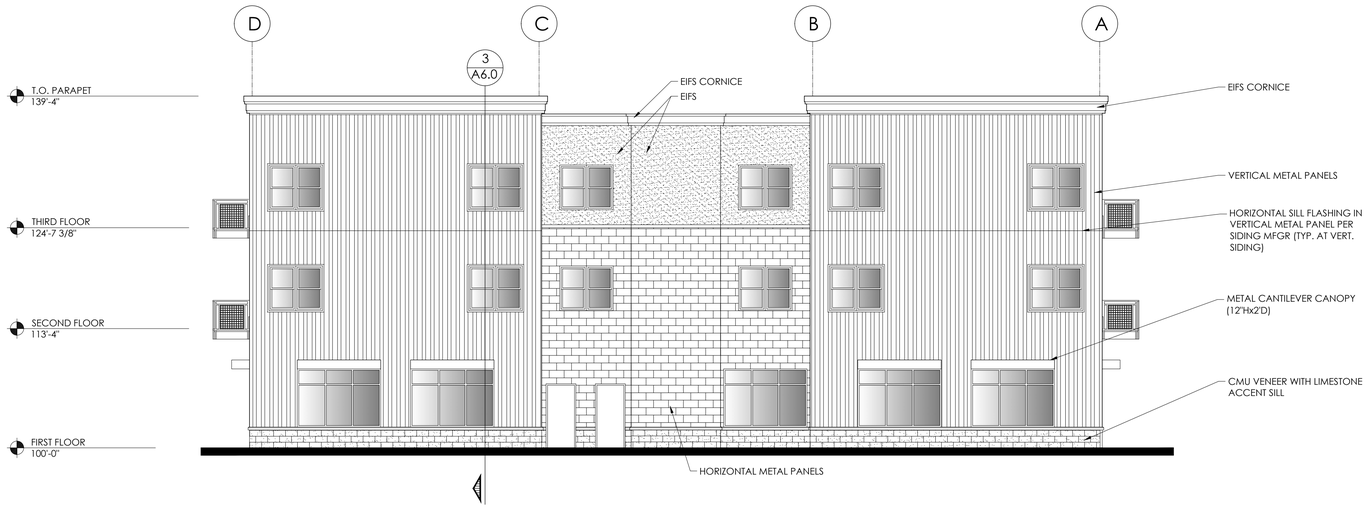
SHEET TITLE:
EXTERIOR ELEVATIONS

DRAWN BY: JMG
PROJECT NUMBER: 20-316-53
DRAWING NUMBER: A4.0



NORTH ELEVATION

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



EAST ELEVATION

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

© COPYRIGHT 2021
CASE ARCHITECTURE, INC.

DATE	ISSUED FOR:

case architecture
ARCHITECTURE • PASSION • INTEGRITY
282 S. MAIN • FREELAND, MI • 989.695.9707

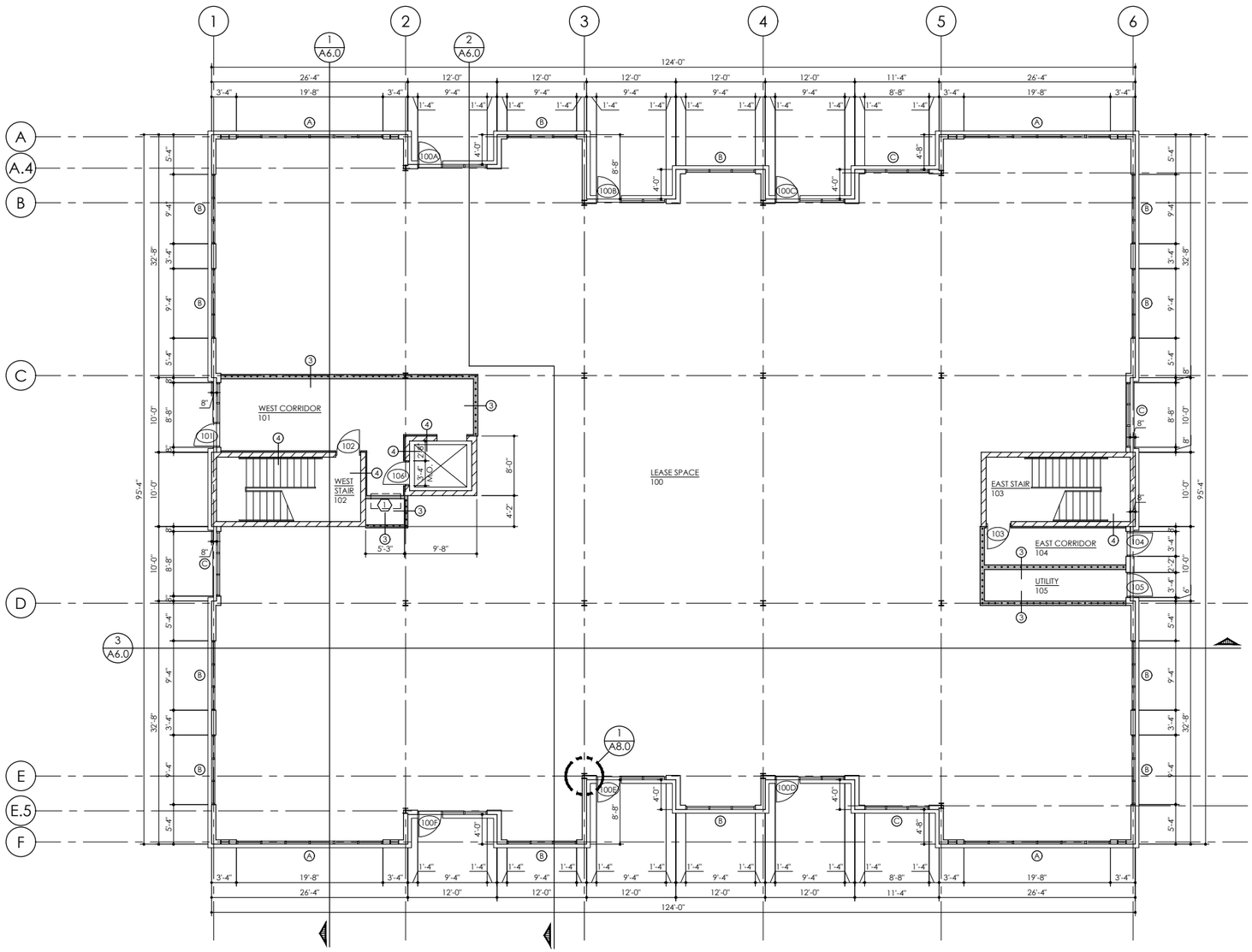
PROJECT:
NEW FACILITY FOR:
THE DEN ON BROOMFIELD
UNION TOWNSHIP, MICHIGAN

SHEET TITLE:
EXTERIOR ELEVATIONS

DRAWN BY: JMG

PROJECT NUMBER: 20-316-53

DRAWING NUMBER: A4.1



FIRST FLOOR PLAN

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

CONSTRUCTION NOTES

1. RECESSED CENTRAL MAIL DELIVERY BOXES.

WALL TYPE LEGEND

NOTE: ALL INTERIOR WALLS ARE TYPE 1 UNLESS OTHERWISE INDICATED.

1. NON-RATED, NON-LOAD BEARING INTERIOR WALL: 5/8" GYPSUM BOARD EA. SIDE OF 2x4 WOOD STUDS @ 16" O.C. WITH FULL DEPTH SOUND ATTENUATION INSULATION. EXTEND WALL CONSTRUCTION FULL HEIGHT TO STRUCTURE ABOVE.

2. 1 HOUR RATED FIRE PARTITION, LOAD BEARING INTERIOR WALL: 5/8" FIRECODE GYPSUM BOARD EA. SIDE OF 2X6 WOOD STUDS @ 16" O.C. WITH FULL-DEPTH SOUND ATTENUATION INSULATION EQUAL TO UL U305. EXTEND WALL CONSTRUCTION FULL HEIGHT TO STRUCTURE ABOVE. (— — —)

3. 1 HOUR RATED FIRE PARTITION, NON-LOAD BEARING INTERIOR WALL: 5/8" FIRECODE GYPSUM BOARD EA. SIDE OF 2X4 WOOD STUDS @ 16" O.C. WITH FULL-DEPTH SOUND ATTENUATION INSULATION EQUAL TO UL U305. EXTEND WALL CONSTRUCTION FULL HEIGHT TO STRUCTURE ABOVE. (• • • • •)

4. 5/8" GYPSUM BOARD ON 1/2" METAL RESILIENT CHANNEL @ 24" O.C. ON 8" CMU.

3-1-2021	SITE PLAN REVIEW
DATE	ISSUED FOR:

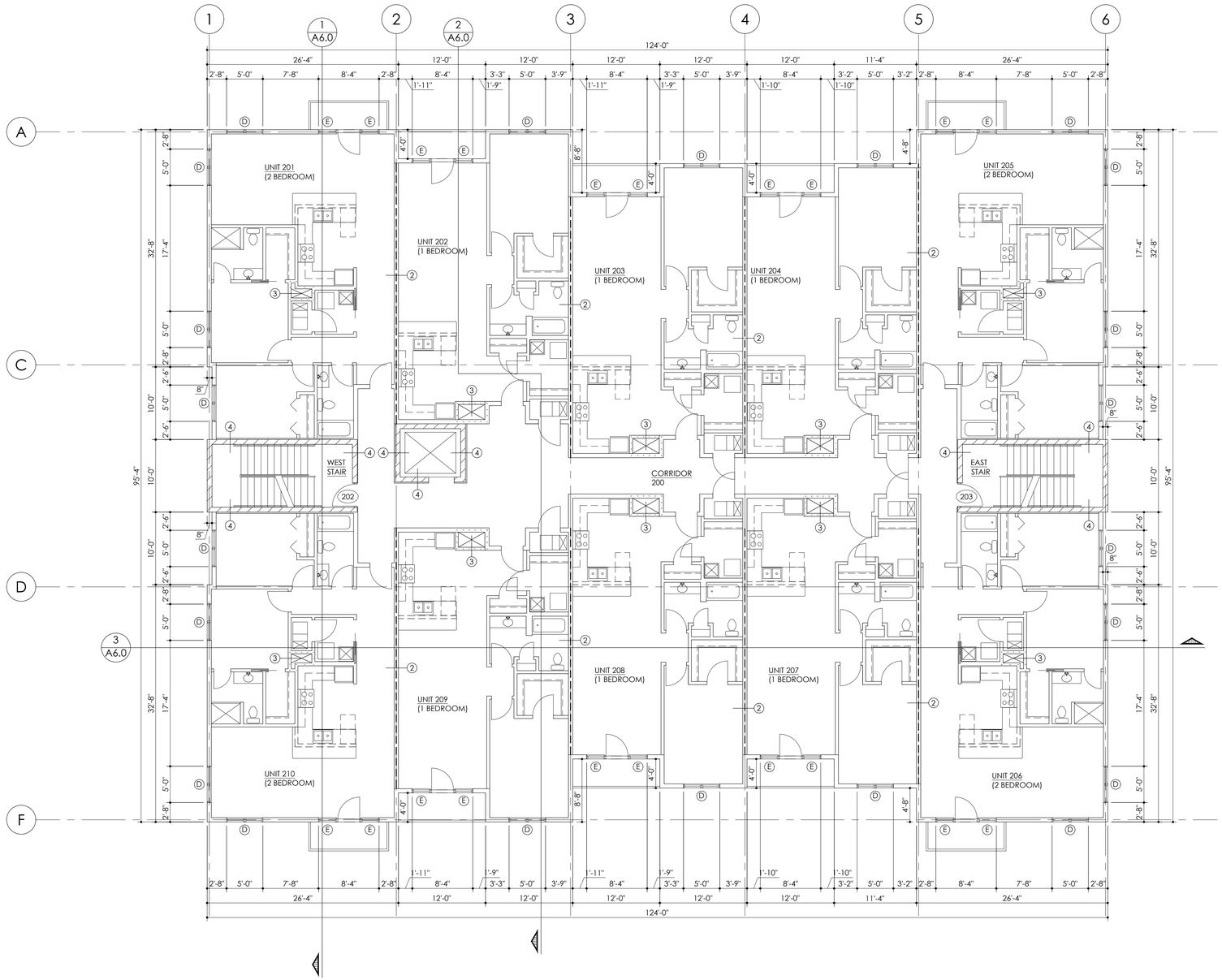
case architecture
ARCHITECTURE • PASSION • INTEGRITY
282 S. MAIN • FREELAND, MI • 989.695.9707

PROJECT:
NEW FACILITY FOR:
THE DEN ON BROOMFIELD
UNION TOWNSHIP, MICHIGAN

SHEET TITLE:
FIRST FLOOR PLAN

DRAWN BY: JMG
PROJECT NUMBER: 20-316-53
DRAWING NUMBER: A1.0

© COPYRIGHT 2021
CASE ARCHITECTURE, INC.



SECOND FLOOR PLAN

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

WALL TYPE LEGEND

NOTE: ALL INTERIOR WALLS ARE TYPE 1 UNLESS OTHERWISE INDICATED.

① NON-RATED, NON-LOAD BEARING INTERIOR WALL: 5/8" GYPSUM BOARD EA. SIDE OF 2x4 WOOD STUDS @ 16" O.C. WITH FULL DEPTH SOUND ATTENUATION INSULATION. EXTEND WALL CONSTRUCTION FULL HEIGHT TO STRUCTURE ABOVE.

② 1 HOUR RATED FIRE PARTITION, LOAD BEARING INTERIOR WALL: 5/8" FIRECODE GYPSUM BOARD EA. SIDE OF 2X6 WOOD STUDS @ 16" O.C. WITH FULL-DEPTH SOUND ATTENUATION INSULATION EQUAL TO UL U305. EXTEND WALL CONSTRUCTION FULL HEIGHT TO STRUCTURE ABOVE. (— — —)

③ 1 HOUR RATED FIRE PARTITION, NON-LOAD BEARING INTERIOR WALL: 5/8" FIRECODE GYPSUM BOARD EA. SIDE OF 2X4 WOOD STUDS @ 16" O.C. WITH FULL-DEPTH SOUND ATTENUATION INSULATION EQUAL TO UL U305. EXTEND WALL CONSTRUCTION FULL HEIGHT TO STRUCTURE ABOVE. (· · · · ·)

④ 5/8" GYPSUM BOARD ON 1/2" METAL RESILIENT CHANNEL @ 24" O.C. ON 8" CMU.

3-1-2021	SITE PLAN REVIEW
DATE	ISSUED FOR:

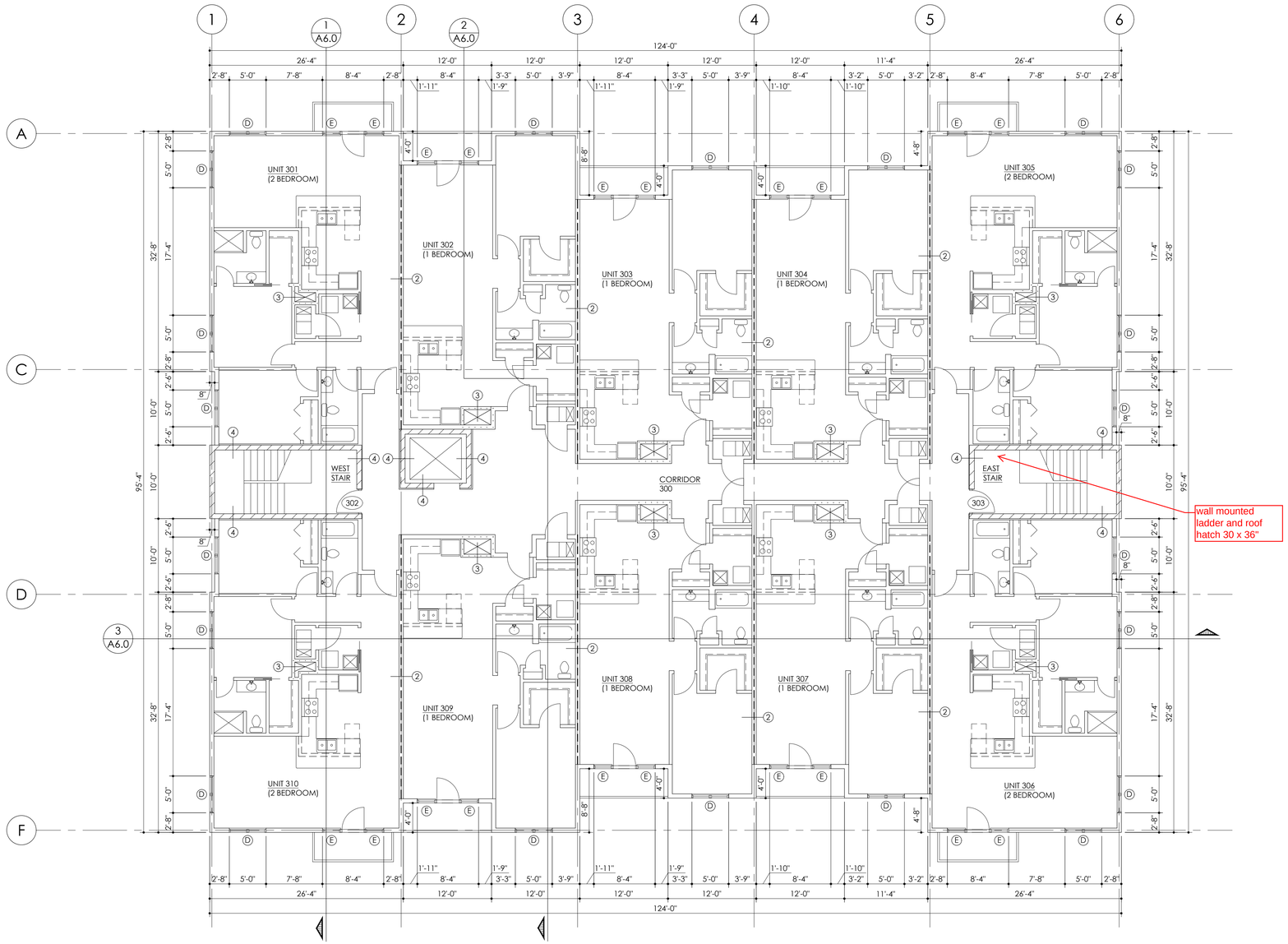
case architecture
ARCHITECTURE • PASSION • INTEGRITY
282 S. MAIN • FREELAND, MI • 989.695.9707

PROJECT:
NEW FACILITY FOR:
THE DEN ON BROOMFIELD
MOUNT PLEASANT, MICHIGAN

SHEET TITLE:
SECOND FLOOR PLAN

DRAWN BY: JMG
PROJECT NUMBER: 20-316-53
DRAWING NUMBER: A1.1

© COPYRIGHT 2021
CASE ARCHITECTURE, INC.



THIRD FLOOR PLAN

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

WALL TYPE LEGEND

NOTE: ALL INTERIOR WALLS ARE TYPE 1 UNLESS OTHERWISE INDICATED.

(1) NON-RATED, NON-LOAD BEARING INTERIOR WALL: 5/8" GYPSUM BOARD EA. SIDE OF 2x4 WOOD STUDS @ 16" O.C. WITH FULL DEPTH SOUND ATTENUATION INSULATION. EXTEND WALL CONSTRUCTION FULL HEIGHT TO STRUCTURE ABOVE.

(2) 1 HOUR RATED FIRE PARTITION, LOAD BEARING INTERIOR WALL: 5/8" FIRECODE GYPSUM BOARD EA. SIDE OF 2X6 WOOD STUDS @ 16" O.C. WITH FULL-DEPTH SOUND ATTENUATION INSULATION EQUAL TO UL U305. EXTEND WALL CONSTRUCTION FULL HEIGHT TO STRUCTURE ABOVE. (— — —)

(3) 1 HOUR RATED FIRE PARTITION, NON-LOAD BEARING INTERIOR WALL: 5/8" FIRECODE GYPSUM BOARD EA. SIDE OF 2X4 WOOD STUDS @ 16" O.C. WITH FULL-DEPTH SOUND ATTENUATION INSULATION EQUAL TO UL U305. EXTEND WALL CONSTRUCTION FULL HEIGHT TO STRUCTURE ABOVE. (· · · · ·)

(4) 5/8" GYPSUM BOARD ON 1/2" METAL RESILIENT CHANNEL @ 24" O.C. ON 8" CMU.

3-1-2021	SITE PLAN REVIEW
DATE	ISSUED FOR:

case architecture
ARCHITECTURE • PASSION • INTEGRITY
282 S. MAIN • FREELAND, MI • 989.695.9707

PROJECT:
NEW FACILITY FOR:
THE DEN ON BROOMFIELD
MOUNT PLEASANT, MICHIGAN

SHEET TITLE:
THIRD FLOOR PLAN

DRAWN BY: JMG

PROJECT NUMBER: 20-316-53

DRAWING NUMBER: A1.2

© COPYRIGHT 2021
CASE ARCHITECTURE, INC.

From: Rick Collins
To: info@cms-d.com
Cc: Peter Gallinat
Subject: RE: Den on Broomfield
Date: Friday, January 8, 2021 3:03:50 PM
Attachments: image001.jpg
image002.jpg

I have no issue with the plans.

Rick Collins |Executive Director
2100 E. Transportation Dr|Mt. Pleasant, MI 48858
Phone 989.773.6766 |Fax 989.773.1873
rcollins@ictcbus.com
Visit our website at ictcbus.com

From: info@cms-d.com <info@cms-d.com>
Sent: Friday, January 8, 2021 10:42 AM
To: Rick Collins <rcollins@ictcbus.com>
Subject: Den on Broomfield

Rick,

You had previously seen this project. We are now turning it in to Union Township for Planning Commission.

Please review and approve or if we need to make some revisions.

Let me know if you need any questions

Thank you



MT. PLEASANT FIRE DEPARTMENT

INSPECTION REPORT

14-103-00-002-00 E BROOMFIELD RD, MT PLEASANT MI 48858

DETAILS

Inspection Date: 01/12/2021 | Inspection Type: PLAN REVIEW UNION TOWNSHIP - Site | Inspection Number: 1925 | Shift: Lieutenant | Station: Mt. Pleasant Fire Department | Unit: N/A | Lead Inspector: RANDY KEELER | Other Inspectors: N/A

STATUS	CODE	DESCRIPTION
FAIL	1 PROPERTY - Identification	No Code Description Inspector: RANDY KEELER - Comments: The Den Location: E Broomfield & Sweeny Two Mixed Use 3 story buildings.
FAIL	501.4 - Timing of installation.	When fire apparatus access roads or a water supply for fire protection is required to be installed, such protection shall be installed and made serviceable prior to and during the time of construction except when approved alternative methods of protection are provided. Temporary street signs shall be installed at each street intersection when construction of new roadways allows passage by vehicles in accordance with Section 505.2. Inspector: RANDY KEELER - Comments:
FAIL	503.1.1 - Buildings and facilities.	Approved fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and shall extend to within 150 feet (45 720 mm) of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility. Exception: The fire code official is authorized toincrease the dimension of 150 feet (45 720 mm) where: 1. The building is equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3. 2. Fire apparatus access roads cannot be installed because of location on property, topography, waterways, nonnegotiable grades or other similar conditions, and an approved alternative means of fire protection is provided. 3. There are not more than two Group R-3 or Group U occupancies. Inspector: RANDY KEELER - Comments: Site Plan meets above requirements.
FAIL	503.2.3 - Surface.	Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be surfaced so as to provide all- weather driving capabilities. Inspector: RANDY KEELER - Comments:

STATUS	CODE	DESCRIPTION
FAIL	ACCESS AND WATER - Road and Water Supply	When fire apparatus access roads or water supply for fire protection is required to be installed, such protection shall be installed and made serviceable prior to and during the time of construction except when approved alternative methods of protection are provided. Temporary street signs shall be installed at each street intersection when construction of new roadways allows passage by vehicles in accordance with Section 505.2 of the 2012 Edition of the International Fire Code. Inspector: RANDY KEELER - Comments:
FAIL	ACCESS ROAD OBSTRUCTED - Dimensions and Clearances	All fire apparatus access roads, including parking lots, shall have an unobstructed width of not less than 20 feet and an unobstructed vertical clearance of not less than 13 feet 6 inches in accordance with Chapter 5, Sections 503.2.1, 503.2.2, 503.3 and 503.4 of the 2012 Edition of the International Fire Code. Fire Prevention Ordinance 93.02(D) Inspector: RANDY KEELER - Comments:
FAIL	AERIAL ACCESS PROXIMITY - Proximity to building	At least one of the required access routes meeting this condition shall be located within a minimum of 15 feet and a maximum of 30 feet from the building, and shall be positioned parallel to one entire side of the building. The side of the building on which the aerial fire apparatus access road is positioned shall be approved by the fire code official as in accordance with Appendix D, Section D 105.3 of the 2012 Edition of the International Fire Code. Inspector: RANDY KEELER - Comments: South Side of building meets aerial access requirements above.
FAIL	BUILDING IDENTIFICATION - Buildings Shall Have Address Numbers	Provide address identification numbers in accordance with Chapter 5, Sections 505.1 of the 2012 Edition of the International Fire Code or applicable to the City of Mt. Pleasant code of ordinances 150.01 Land Usage. Inspector: RANDY KEELER - Comments: 6 inch in size visible from street side of building
FAIL	GENERAL (SITE PLAN) - Provide a Site Plan Showing the FDC	Provide a site plan to the Code/Fire Official for review showing the fire department connection location.a.The fire department connection shall be located and be visible on a street front, in an approved location.b.The fire department connection shall not be obstructed.c.The fire department connection shall be located between 18" minimum and 42" maximum above the ground.d.Provide a 5" Storz fire department connection.e.Provide a ball drip on the fire department connection piping. It shall be located between the check valve and the fire department connection at the lowest point in the piping.f.Provide a sign mounted on the fire department connection. The sign shall read "Automatic Sprinkler".MBC 901.2IFC 903.3; 912NFPA 13, 8.17.2 Inspector: RANDY KEELER - Comments: Location of FDC's south side of building and confirmed location to be approved by Fire Marshal. Horn strobe required to be located above FDC location.

STATUS	CODE	DESCRIPTION
FAIL	GENERAL STATEMENT - List Not All-Inclusive	This list shall not be considered all-inclusive, as other requirements may be necessary, additional requirements are located in Chapter 5 and appendixes B, C, and D of the 2012 Edition of the International Fire Code. Inspector: RANDY KEELER - Comments: Any changes in site plan/building may require additional fire code requirements.
FAIL	HYDRANT DISTANCE - Hydrant maximum distance from buildings	Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 400 feet (122 m) from a hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the fire code official. Exceptions: 1. For Group R-3 and Group U occupancies, the distance requirement shall be 600 feet (183 m). 2. For buildings equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, the distance requirement shall be 600 feet (183 m). Inspector: RANDY KEELER - Comments: Site Plan meets above requirements
FAIL	KNOX BOX - Knox Box Requirements and Location	Provide a Knox Key entry device and install it in approved location by the Fire Code Official, as in accordance with Chapter 5, Section 506.1, 506.1.1 and 506.2 of the 2012 Edition of the International Fire Code. (Go to Knoxbox.com and search by fire department or zip code - select "Mt. Pleasant Fire Department" and place order for the type of Knox box desired.) Inspector: RANDY KEELER - Comments: Provide knoxbox for location
FAIL	WATER SUPPLY (SPACING) - Number and Spacing of Hydrants	Provide fire hydrant locations in accordance with Chapter 5, Section 507.5.1 of the 2012 Edition of the International Fire Code. The number and spacing of fire hydrants is based on the construction type and square footage of the building in accordance with Appendix B and C and tables B105.1 and C105.1 of the 2012 Edition of the International Fire Code. Inspector: RANDY KEELER - Comments: Total Square feet: 32,613 three floors. 5000gpm required 50% reduction for sprinkled buildings = 2500gpm. 3 Hydrants required with 450' spacing. Site plan meets requirements.

GENERAL NOTES

RANDY KEELER - 01/12/2021 @ 10:58	Recommending Site Plan approval.

NEXT INSPECTION DATE

No Inspection Scheduled

CONTACT SIGNATURE

Tim Bebee

Contact Refused
Refusal Reason: Site Plan Review

INSPECTOR SIGNATURE

RANDY KEELER
Signed on: 01/12/2021 @ 10:58



QUESTIONS ABOUT YOUR INSPECTION?

RANDY KEELER
rkeeler@mt-pleasant.org
9897795122

BARTOW & KING ENGINEERS INC.
CIVIL ENGINEERS - SURVEYORS - CONSULTANTS
304 W. WACKERLY STE 800 MIDLAND MICHIGAN 48640
PH-989-837-3280 FAX-989-837-3290

Stormwater Management Calculations		
Site Input Data		
Project:		Tallgrass Commons
Project #:		BKE #050907
Project Location:		Union Twp, Isabella County
Date:		April 9, 2008
Calculated By:		Michael J. Rybicki, P.E.
Checked By:		
Total Acres:		35.29 Acres. Lots 8 & 10 are not included
Qu (cfs/acre)	0.10	and will provide separate detention
A (acres)	35.3	
Cw, Runoff Coef.	0.750	

Detention Volume (100-Year Storm Event)			
Qa, Allowable Discharge Rate	=	3.53	cfs
Qo, Maximum Flow Rate	=	0.13	cfs/acre
T, Storage Time	=	233.7	min
Vs, Volume of Storage per Ai	=	11654	cft/acre
Vt, Total Storage Required	=	**308442**	cft

Detention Volume Required		
	=	**308442 cft**

Formulas/Definitions		
Qu, Unit Allowable Discharge Rate		0.10 cfs/ acres of total site
A, Acreage of Site		
Ai, Impervious Acreage (Post Construction)		
Ap, Pervious Acreage (Post Construction)		
Ci, Impervious Runoff Coefficient (Post Construction)		
Cp, Pervious Runoff Coefficient (Post Construction)		
Cw, Weighted Runoff Coef.	=	[(Ai*Ci)+(Ap*Cp)]/A
Qa, Allowable Discharge Rate	=	Qu*A
Qo, Maximum Flow Rate	=	Qa/(A*Cw)
T, Storage Time	=	[(8925/Qo)^0.5]-25
Vs, Volume of Storage per Ai	=	[(14280*T)/(T+25)] - (40*Qo*T)
Vt, Total Storage Required	=	Vs*A*Cw

Notes: Outlet is to the Mead Drain

BARTOW & KING ENGINEERS INC.
CIVIL ENGINEERS - SURVEYORS - CONSULTANTS
304 W. WACKERLY STE 600 MIDLAND MICHIGAN 48640
PH-989-837-3280 FAX-989-837-3290

Proposed Stormwater Management Calculations

Project:	Sweeny Road Extension - Bluegrass and Shackleford
Project #:	50907.00000
Project Location:	Union Twp, Michigan
Date:	April 1,2008
Calculated By:	Michael J. Rybicki, P.E.
Checked By:	

Input Data		
Qa, Allowable Runoff	3.53	cfs
h, head	6.8	ft
C (coefficient)	0.62	

Restrictor Sizing Calculations		
Q = CA (2gh)^0.5 (cfs)		
A, Area of Pipe	0.2721	sft
r, Radius of Pipe	0.2943	ft
d, Diameter of Pipe (ft)	0.5886	ft
d, diameter of Pipe (in)	7.0629	in

Restrictor Size Required 7.06 in

Storm Water Detention Summary

Required Detention Volume Per Outlot				
Bluegrass Parcel	**Lot Area (Acres)**	**Percent of Development Area**	**Allowable Discharge (CFS)**	**Required Detention Volume (CFT)**
Outlot #1	1.09	3.09%	0.11	9527
Outlot #2	1.19	3.37%	0.12	10401
Outlot #3	1.28	3.63%	0.13	11187
Outlot #4	2.13	6.04%	0.21	18617
Outlot #5	1.09	3.09%	0.11	9527
Outlot #6	1.07	3.03%	0.11	9352
Outlot #7	2.19	6.21%	0.22	19141
Outlot #9	1.27	3.60%	0.13	11100
Road R-W	5.06	14.34%	0.51	44225
Outlot #11	1.21	3.43%	0.12	10576
Outlot #12	1.21	3.43%	0.12	10576
Outlot #13	1.26	3.57%	0.13	11013
Outlot #14	3.4	9.63%	0.34	29717
Outlot #15	2.93	8.30%	0.29	25609
Outlot #16	1.82	5.16%	0.18	15907
Outlot #17	2.39	6.77%	0.24	20889
Outlot #18	1.57	4.45%	0.16	13722
Outlot #19	1.57	4.45%	0.16	13722
Outlot #20	1.56	4.42%	0.16	13635
Total	**35.29**	**100.00%**	**3.53**	**308442**

Draft Motions: PSPR 21-09 The Den on Broomfield Final Site Plan Review Application

MOTION TO ACCEPT THE PROPOSED BUILDING ELEVATIONS AS PRESENTED:

Motion by _____, supported by _____, to accept the proposed building elevations as presented, finding that the building form, composition, and mix of exterior façade materials depicted on the final site plan sheets A4.0 and A4.1 for The Den on Broomfield development are consistent with adopted Master Plan policies for the Bluegrass Center Area and commercial development.

MOTION TO REQUEST REVISIONS TO THE PROPOSED BUILDING ELEVATIONS:

Motion by _____, supported by _____, to request revisions to the proposed building elevations, finding that building form, composition, and mix of exterior façade materials depicted on the final site plan sheets A4.0 and A4.1 for The Den on Broomfield development are not consistent with the following adopted Master Plan policies for the Bluegrass Center Area and commercial development:

- ❑ *"Building architecture should possess a timeless character that signifies the presence of the commercial area and reflects pedestrian-oriented design. The use of high-quality building materials is strongly recommended to create a memorable character."*
- ❑ *"All buildings should have exterior facades made of brick, glass, wood, and cut or simulated stone."*
- ❑ *"All front facades should have windows and distinguishing architectural features commonly associated with the front of a building, such as awnings, cornice work, edge detailing, or other decorative finishes. Similar treatment is also needed on the side and rear depending on visibility from the roadway and surrounding property."*
- ❑ _____

  _____

FOR THE FOLLOWING REASON(S):

_____

_____

_____

_____

_____

_____

_____

_____

Draft Motions: PSPR 21-09 The Den on Broomfield Final Site Plan Review Application

MOTION TO APPROVE THE FINAL SITE PLAN AS PRESENTED:

Motion by _____, supported by _____, to approve the PSPR 21-09 final site plan for The Den on Broomfield development, which consists of two (2) mixed-use commercial-residential buildings on parcel numbers 14-103-00-001-00 and 14-103-00-02-00, located on approximately 2.14 acres located at the southwest corner of E. Broomfield Road and Sweeney Road in the northeast quarter of Section 26 and in the B-5 (Highway Business) zoning district, finding that the April 22, 2021 site plan fully complies with the applicable Zoning Ordinance requirements for final site plan approval, including Sections 14.2.P. (Required Site Plan Information) and 14.2.S. (Standards for Site Plan Approval).

MOTION TO APPROVE THE FINAL SITE PLAN WITH CONDITIONS:

Motion by _____, supported by _____, to approve the PSPR 21-09 final site plan for The Den on Broomfield development, which consists of two (2) mixed-use commercial-residential buildings on parcel numbers 14-103-00-001-00 and 14-103-00-02-00, located on approximately 2.14 acres located at the southwest corner of E. Broomfield Road and Sweeney Road in the northeast quarter of Section 26 and in the B-5 (Highway Business) zoning district, finding that the April 22, 2021 site plan can comply with applicable Zoning Ordinance requirements for final site plan approval, including Sections 14.2.P. (Required Site Plan Information) and 14.2.S. (Standards for Site Plan Approval), subject to the following condition(s):

1. Township Public Services Department approval, prior to issuance of a building permit for this project.
2. Revise the final site plan to correct typos on plan for parking calculations, landscaping, and other notes; add the required landscape plantings installation and maintenance plan details; and correct the photometric plan and provide the fixture details and specifications needed to confirm compliance with Section 8.2 (Exterior Lighting).
3. Submittal of a revised final site plan for administrative review and acceptance by the Zoning Administrator, prior to issuance of a building permit for this project.

_____

_____

MOTION TO POSTPONE ACTION:

Motion by _____, supported by _____, to postpone action on the PSPR 21-09 final site plan for The Den on Broomfield development on parcel numbers 14-103-00-001-00 and 14-103-00-02-00 until _____ _____, 2021 for the following reasons: _____

_____

_____

_____

Draft Motions: PSPR 21-09 The Den on Broomfield Final Site Plan Review Application

MOTION TO DENY:

Motion by _____, supported by _____, to deny the PSPR 21-09 final site plan for The Den on Broomfield development, which consists of two (2) mixed-use commercial-residential buildings on parcel numbers 14-103-00-001-00 and 14-103-00-02-00, located on approximately 2.14 acres located at the southwest corner of E. Broomfield Road and Sweeney Road in the northeast quarter of Section 26 and in the B-5 (Highway Business) zoning district, finding that the April 22, 2021 site plan does not comply with applicable Zoning Ordinance requirements, including Sections 14.2.P. (Required Site Plan Information) and 14.2.S. (Standards for Site Plan Approval), for the following reasons:

_____

_____

_____

_____

_____

_____

Community and Economic Development Department
2010 S. Lincoln Rd.
Mt. Pleasant, MI 48858
989-772-4600 ext. 232

COMBINED PRELIMINARY - FINAL SITE PLAN REPORT

TO:	Planning Commission	**DATE:**	May 11, 2021
FROM:	Peter Gallinat, Zoning Administrator	**ZONING:**	B-4 General Business District

PROJECT: PSPR21-10 Combined Preliminary and Final Site Plan Approval application for the next phase of the Broomfield Commons Condominium commercial development.

PARCEL(S): PID 14-048-00-006-00

OWNER(S): McGuirk Mini Storage Inc, Broomfield Commons Condominium Association, IDFC Investments LLC.

LOCATION: Approximately 10.1 acres on the south side of E. Broomfield Rd. 2,000 feet east of S. Lincoln Rd. in the NW 1/4 of Section 28.

EXISTING USE: CMS Internet Services and Jump Station. **ADJACENT ZONING:** B4, R1

FUTURE LAND USE DESIGNATION: *Recreational/Institutional.* This category is designated primarily for indoor/outdoor recreation both private and publicly owned.

ACTION REQUESTED: To review and take action to approve, deny, or approve with conditions the PSPR21-10 combined preliminary and final site plan dated April 26, 2021 for a new 41,600 square-foot building, a 4,800 square-foot addition, and an 11,500 square-foot addition to existing buildings in the NW 1/4 of Section 28 and in the B-4 (General Business) district.

Background Information

This project is part of the Broomfield Commons Condominium which was developed after the construction of the existing buildings on site. The existing red barn has been on site for quite some time with different tenants over the years. The addition of what will be the middle building was developed back in 2015. There have been a few iterations of possible other buildings proposed over the years. The last site plan approved for expansion was in 2017 as SPR 2017-09. At that time, the plan was for a middle building to be constructed to connect the red barn building and the northern building where the Jump station building is located.

Zoning Administrator's Determination

A question was brought to the Zoning Administrator's attention in conjunction with this project as to whether or not leasing out a room for dance lessons, gymnastics, martial arts classes, or other limited physical education classes as leisure time activities would be considered part of a "health Club, Exercise Club or Spa" or part of an Indoor Recreational Facility" as the Zoning Ordinance defines these terms. The issue in question is whether or not the expanded 100-foot setback area required for indoor recreation facilities (Section 6.47) would apply.

The following is the determination of the Zoning Administrator in response to this question:

The existing 10,000 square foot building in the middle of the property that houses the Jump Station was granted a variance for the required 100-foot setback for indoor recreational use from a residential district in November of 2015 as VAR2015-06. The building was built with a 40-foot variance as was required for a B-4 district abutting an R-1 district but required the additional 60 feet for the indoor recreational use. The 100-foot requirement is still required in the new Zoning Ordinance No. 20-06 for "Indoor Commercial Recreation Uses."

Recreational Facilities are defined in section 2 as: "*Uses that are designed to provide the user with the opportunity to relax, engage in athletic activity, or engage in other leisure pursuits, including the following subcategories. Conservation and/or preservation easements shall not be considered recreational facilities unless they specifically allow for public access and use that meets this definition.* Indoor Recreational Facilities are further defined as being *"located predominantly within an enclosed building,"* with the following examples listed: *"bowling establishments, billiard halls, indoor archery ranges, indoor tennis courts, indoor skating rinks."*

Health Club, Exercise, Club, or Spa is listed as separate use in section 3.4 from Indoor Commercial Recreation. Health Club, Exercise Club, or Spa is defined in section 2 as: *"A building or portion of a building designed and equipped for the conduct of sports, exercise, leisure time activities, or other customary and usual recreational activities that occur in an entirely enclosed building. Such uses are operated for profit or not-for-profit and can be open only to bona fide members and guests of the organization or open to the public for a fee. Such uses may also include massage services, saunas, locker rooms, showers, or personal services."*

As the new buildings are constructed and leased out it is my determination that uses such as a Health Club, Exercise Club, or Spa would not require the 100-foot setback from a residentially zoned parcel. I would further consider uses such leasing out a room for dance lessons, gymnastics, martial arts classes, or other limited physical education classes and similar leisure time activities that occur in an entirely enclosed building to be part of a Health Club, Exercise Club, or Spa land use. These uses would not be considered indoor commercial recreation.

My suggestion to the Planning Commission is to consider combining the two similar uses and eliminating the 100-foot setback requirement as part of a zoning ordinance amendment. This would provide more clarity, as the two uses are similar while also removing what is perhaps an outdated setback requirement.

Notes on the Existing Special Use Permit 2017-03

In July of 2017 the Township approved special use permit 2017-03 retail sales of new or used cars, trucks, boats, travel trailers, and motor homes on eleven (11) parking spaces on the condition that no farm equipment and mobile homes not be sold. These eleven parking spaces were shown on the northeast of the property where there are now ten (10) spaces shown for this development. It is not required that this special use be a part of the development. However, the special use stays with the land regardless of change in ownership or uses of the property.

The eleven spaces can be used for parking or sale of items permitted under SUP2017-03. The identification of this area as reserved for the uses allowed under SUP2017-03 must be added to the site plan.

Review Comments

The following review comments are based on the applicable Ordinance requirements, the required information for preliminary and final site plans (see Section 14.2.P.), and the standards for preliminary and final site plan approval found in Section 14.2.S. of the new Zoning Ordinance.

1. **Section 14.2.P. - Site Plan Information Requirements.** Three enclosed dumpster locations have been proposed on the site plan page 3 of 9 and details on page 6 of 9. See Section 7.14 for requirements of Trash Removal and Collection. The following details need to be addressed by the applicant on a revised site plan:

   - ❑ Determine if fence will be vinyl or wood. If wood, confirm compliance with Section 7.14.D on the page 6 of 9 details sheet.
   - ❑ Include the proposed height of the enclosure on the details sheet.
   - ❑ Label dumpster locations on page 3 of 9.

2. **Section 3.13. - Setbacks.** The location of the proposed buildings meets setback requirements for abutting both business and residential districts. As a note for future use, the proposed five-unit building to the south does not meet the minimum 100-foot setback for an indoor recreational facility use from the neighboring R-1 district.

3. **Section 8.1.B.6. - Environmental Performance Standards.** Applicant has provided the hazardous substances reporting form and EGLE permit check list.

4. **Section 9.1 - Parking.** The parking space width of 9.0 feet is sufficient. The minimum drive aisle of 24 feet is demonstrated. Parking calculations are correct, and the plan provides more than the minimum required parking. The plan notes that exact uses are not known for the leasable areas and instead the general retail use is used as a placeholder. Exact required parking will be counted as the units are leased out. The plan notes additional parking may be needed. The following detail needs to be addressed by the applicant on a revised site plan:

   - ❑ Confirm on the site plan that all 90-degree parking spaces proposed are at least 18.5 feet in length while keeping a minimum of a 24-foot-wide drive aisle (some proposed parking spaces on the plan show a length of 18.0 feet).

5. **Section 9.5 – Loading Space.** Loading area is shown the proposed five-unit building to the south. The loading space shown meets the location (rear of building), size (10 feet wide 500 feet long) and the number (2 spaces for 41,000SF). The following detail needs to be addressed by the applicant on a revised site plan:

   - ❑ Add required loading spaces for the northern and middle buildings to the plan.

6. **Section 9.6 - Access Management.** There is one existing curb cut from E. Broomfield Road that meets Road Commission standards. The one cut provides two points of access each 24.7 feet wide. Cross access to properties to the east and west is currently not practical. The property use to the west is the golf center where a cross access point would run into either the put-put golf area or the driving range. The property to the east is undeveloped

and this project has required detention ponds located on much of the east. If these 3 parcels become more commercially developed a connection could be made to the south cross connecting eastern and western neighbors while creating access to this site from its southern rear border.

7. **Section 7.10 - Sidewalks and Pathways.** The plan shows a 5-foot-wide sidewalk as required that is constructable as demonstrated on the plan. The location of the sidewalk is not within the right-of-way as required by the Sidewalk and Pathway Ordinance. However, the ordinance permits the Planning Commission to approve modifications as needed for things such as location. This modification will be deemed as approved by the planning commission when the site plan is approved. The following detail needs to be addressed by the applicant on a revised site plan:

   - ❑ A copy of the as-recorded easement for the new public sidewalk outside of the road right-of-way must be provided to the Zoning Administrator prior to issuance of a building permit for the project.

8. **Section 8.2. - Exterior Lighting.** Plan commits demonstrates down shielded lighting as depicted by drawings on the plan page 9 of 9. The following exterior lighting detail still needs to be addressed by the applicant to confirm compliance with Section 8.2:

   - ❑ The photometric plan required to verify compliance with the maximum illumination levels listed in Section 8.2.C.1. of the Zoning Ordinance is missing from the final site plan set.

9. **Section 10. – Landscaping and Screening.** The landscaping plan is shown on page 7 of 9 on the site plan. The plan shows accurate calculations for planting of deciduous trees, ornamental trees, and shrubs. The plan includes street planning requirements and screening against residential uses. Please add and correct the following:

   - ❑ Section 10.3 maximum berm height is 3 feet. Berm shown is 4 feet as shown on page 4 of 9 (top of berm 701 from 697 and 696 to 700).
   - ❑ Parking Lot landscaping is noted on the plan as 357/5 = 71 trees. Please see Section 10.2.F for required parking lot landscaping and correct the plan.
   - ❑ See Section 10.7 and provide written reasons on the site plan as to why an alternative landscaping/screening scheme is proposed, different from ordinance requirements, and how the alternative satisfies the criteria in Section 10.7.

Key Findings

1. The site plan is sufficiently complete for consideration of preliminary site plan approval, but a number of items of information required by Section 14.2.P. for a final site plan are missing, incomplete or in need of adjustment to conform to Ordinance standards.
2. Approvals from the Isabella County Road Commission, Isabella Country Transportation Commission, Mt. Pleasant Fire Department, and Isabella County Drain Office for Storm Water Management have been received. The site plan is currently under review by the

Township Public Services Department related to water and sanitary sewer services.

3. The site plan conforms to the standards for preliminary site plan approval found in Section 14.2.S. (Standards for Site Plan Approval), but does not fully conform to the applicable standards for final site plan approval.

Recommendation

Based on the above findings, I would ask that the Planning Commission consider taking action to approve the PSPR21-10 combined preliminary and final site plan, subject to the following conditions:

1. Township Public Services Department approval, prior to issuance of building permits for this project.
2. Provide a copy of the as-recorded easement for the new public sidewalk outside of the road right-of-way to the Zoning Administrator prior to issuance of building permits for this project.
3. Add the missing items of required information per Section 14.2.P. to a revised site plan.
4. Correct and update the trash dumpster details, parking and loading space details, and landscaping details on a revised site plan to conform to Zoning Ordinance requirements.
5. Provide the required photometric plan and exterior lighting details and specifications to verify compliance with Section 8.2 as part of a revised final site plan set.
6. Submittal of a revised final site plan for administrative review and acceptance by the Zoning Administrator, prior to issuance of a building permit.

Please contact me at (989) 772-4600 ext. 241, or via email at pgallinat@uniontownshipmi.com, with any questions about this information.

Respectfully submitted,

Peter Gallinat, Zoning Administrator
Community and Economic Development Department

Charter Township of Union

APPLICATION FOR SITE PLAN REVIEW

☐ Minor Site Plan ☑ Preliminary Site Plan ☑ Final Site Plan

A Completed Application will contain all the information required per the Zoning Ordinance, Section 14.2 (Site Plan Review).

Name of Proposed Development/Project: MCGUIRK'S BROOMFIELD ROAD DEVELOPMENT

Common Description of Property & Address (if issued): 2420 E. BROOMFIELD ROAD, MT. PLEASANT MI

Applicant's Name(s): MCGUIRK MINI STORAGE INC

Phone/Fax numbers: 989-772-1309 Email: chuck@mcguirksand.com

Address: P.O. BOX 530 City: MT. PLEASANT Zip: 48804

Legal Description: ☐ Attached ☑ Included on Site Plan Tax Parcel ID Number(s): 14-028-10-002-02

Existing Zoning: B-4 Land Acreage: 10.1 Existing Use(s): SEE PROJECT DESCRIPTION SHEET 3

☑ **ATTACHED: Letter describing the project and how it conforms to Section 14.2.S. (Standards for Site Plan Approval)**

SEE PAGE 3 OF SITE PLAN FOR PROJECT DESCRIPTION

Firm(s) or Individuals(s) who prepared site plan(s)	1. Name: CMS&D Phone: 9897750756 Email: tbebee@cms-d.com 2. Address: 2257 EAST BROOMFIELD ROAD City: MT. PLEASANT State: Zip: 48858 Contact Person: TIMOTHY BEBEE Phone 9897750756
Legal Owner(s) of Property. All persons having legal interest in the property must sign this application. Attach a separate sheet if more space is needed.	1. Name: MCGUIRK MINI STORAGE INC Phone: 989-772-1309 Address: P.O. BOX 530 City: MT. PLEASANT State: MI Zip: 48804 Signature: Interest in Property: OWNER 2. Name: Phone: Address: City: State: Zip: Signature: Interest in Property:

I do hereby affirm that all the statements, signatures, descriptions, exhibits submitted on or with this application are true and accurate to the best of my knowledge and that I am authorized to file this application and act on behalf of all the owners of the property. False or inaccurate information placed upon this plan may be cause for revocation of any permits issued pursuant to site plan approval and/or removal of work installed. Approval of this plan shall not constitute the right to violate any provisions of the Zoning Ordinance or other applicable codes and ordinances.

Signature of Applicant 4/26/21 Date

Office Use Only

Application Received By: Fee Paid: $

Date Received: Escrow Deposit Paid: $

Revised: 9/14/2020

Charter Township of Union

APPLICATION FOR SITE PLAN REVIEW

☐ Minor Site Plan ☑ Preliminary Site Plan ☑ Final Site Plan

A Completed Application will contain all the information required per the Zoning Ordinance, Section 14.2 (Site Plan Review).

Name of Proposed Development/Project: MCGUIRK'S BROOMFIELD ROAD DEVELOPMENT

Common Description of Property & Address (if issued): 2420 E. BROOMFIELD ROAD, MT. PLEASANT MI

Applicant's Name(s): IDFC INVESTMENTS LLC

Phone/Fax numbers: 989-289-5100 Email: jeremy@cmsinter.net

Address: 1740 LEROY LANE City: MT. PLEASANT Zip: 48858

Legal Description: ☐ Attached ☑ Included on Site Plan Tax Parcel ID Number(s):

Existing Zoning: B-4 Land Acreage: 10.1 Existing Use(s): SEE PROJECT DESCRIPTION SHEET 3

☑ **ATTACHED: Letter describing the project and how it conforms to Section 14.2.S. (Standards for Site Plan Approval)**

SEE PAGE 3 OF SITE PLAN FOR PROJECT DESCRIPTION

Firm(s) or Individuals(s) who prepared site plan(s)	1. Name: CMS&D Phone: 9897750756 Email: tbebee@cms-d.com 2. Address: 2257 EAST BROOMFIELD ROAD City: MT. PLEASANT State: Zip: 48858 Contact Person: TIMOTHY BEBEE Phone: 9897750756
Legal Owner(s) of Property. All persons having legal interest in the property must sign this application. Attach a separate sheet if more space is needed.	1. Name: IDFC INVESTMENTS LLC Phone: 989-289-5100 Address: 1740 LEROY LANE City: MT. PLEASANT State: MI Zip: 48858 Signature: Interest in Property: OWNER 2. Name: Phone: Address: City: State: Zip: Signature: Interest in Property:

I do hereby affirm that all the statements, signatures, descriptions, exhibits submitted on or with this application are true and accurate to the best of my knowledge and that I am authorized to file this application and act on behalf of all the owners of the property. False or inaccurate information placed upon this plan may be cause for revocation of any permits issued pursuant to site plan approval and/or removal of work installed. Approval of this plan shall not constitute the right to violate any provisions of the Zoning Ordinance or other applicable codes and ordinances.

Signature of Applicant Date

Office Use Only

Application Received By: Fee Paid: $

Date Received: Escrow Deposit Paid: $

Revised: 9/14/2020

Charter Township of Union

APPLICATION FOR SITE PLAN REVIEW

☐ Minor Site Plan ☑ Preliminary Site Plan ☑ Final Site Plan

A Completed Application will contain all the information required per the Zoning Ordinance, Section 14.2 (Site Plan Review).

Name of Proposed Development/Project: MCGUIRK'S BROOMFIELD ROAD DEVELOPMENT

Common Description of Property & Address (if issued): 2420 E. BROOMFIELD ROAD, MT. PLEASANT MI

Applicant's Name(s): BROOMFIELD COMMONS CONDOMINIUM ASSOCIATION

Phone/Fax numbers: 989-772-1309 Email: chuck@mcguirksand.com

Address: P.O. BOX 653 City: MT. PLEASANT Zip: 48804

Legal Description:	☐	Attached	☑	Included on Site Plan	Tax Parcel ID Number(s):	14-048-00-006-00	
Existing Zoning:	B-4	Land Acreage:	10.1	Existing Use(s):	SEE PROJECT DESCRIPTION SHEET 3		

☑ **ATTACHED: Letter describing the project and how it conforms to Section 14.2.S. (Standards for Site Plan Approval)**

SEE PAGE 3 OF SITE PLAN FOR PROJECT DESCRIPTION

Firm(s) or Individuals(s) who prepared site plan(s)	1. Name: CMS&D Phone: 9897750756 Email: tbebee@cms-d.com 2. Address: 2257 EAST BROOMFIELD ROAD City: MT. PLEASANT State: Zip: 48858 Contact Person: TIMOTHY BEBEE Phone 9897750756
Legal Owner(s) of Property. All persons having legal interest in the property must sign this application. Attach a separate sheet if more space is needed.	1. Name: BROOMFIELD COMMONS CONDOMINIUM ASSOCIATION Phone: 989-772-1309 Address: P.O. BOX 653 City: MT. PLEASANT State: MI Zip: 48858 Signature: Interest in Property: OWNER 2. Name: Phone: Address: City: State: Zip: Signature: Interest in Property:

I do hereby affirm that all the statements, signatures, descriptions, exhibits submitted on or with this application are true and accurate to the best of my knowledge and that I am authorized to file this application and act on behalf of all the owners of the property. False or inaccurate information placed upon this plan may be cause for revocation of any permits issued pursuant to site plan approval and/or removal of work installed. Approval of this plan shall not constitute the right to violate any provisions of the Zoning Ordinance or other applicable codes and ordinances.

Signature of Applicant — Date: 4/26/21

Office Use Only

Application Received By: Fee Paid: $

Date Received: Escrow Deposit Paid: $

Revised: 9/14/2020

CHARTER TOWNSHIP OF UNION

SITE PLAN REVIEW
HAZARDOUS SUBSTANCES REPORTING FORM

This form must be completed and submitted as part of the site plan for facilities which may use, store, or generate hazardous substances or polluting materials (including petroleum-based products)

Name of business: BROOMFIELD COMMONS CONDOMINIUM ASSOCIATION

Name of business owner(s): CHUCK MCGUIRK

Street and mailing address: 3046 JENS WAY
MT. PLEASANT, MI 48858

Telephone: 989-772-1309

Fax: _____

Email: chuck@mcguirksand.com

I affirm that the information submitted is accurate.

Owner(s) signature and date:

_____

_____

Information compiled by:

Central Michigan Surveying & Development Co. Inc.

_____

Types and Quantities of Hazardous Substances and Polluting Materials Used, Stored or Generated On-Site

Please list the hazardous substances and polluting materials (including chemicals, hazardous materials, petroleum products, hazardous wastes and other polluting materials) which are expected to be used, stored or generated on -site. Quantities should reflect the maximum volumes on hand at any time. Attach additional pages if necessary to list all hazardous substances and polluting materials.

COMMON NAME	CHEMICAL NAME (components)	FORM	MAX QUANTITY ON HAND AT ONE TIME	TYPE OF STORAGE CONTAINERS
N/A				
_____ NONE	KEY: LIQ. = liquid P.LIQ = pressurized liquid S = solids G = gas PG = pressurized gas			KEY: AGT = above ground tank DM = drums UGT = underground tank Cy = cylinders CM = metal cylinders CW = wooden or composition container TP = portable tank

PERMIT INFORMATION CHECKLIST FOR FINAL SITE PLANS

Michigan.gov/EGLEpermits

The Michigan Department of Environment, Great Lakes, and Energy (EGLE) has prepared a list of key questions to help identify what EGLE permits, licenses, or approvals of a permit-like nature may be needed. By contacting the appropriate offices indicated, you will help reduce the possibility that your project or activity will be delayed due to the untimely discovery of additional permitting requirements later in the construction process. While this list covers the existence of permits and approvals required from EGLE, it is not a comprehensive list of all legal responsibilities. A useful way to learn whether other requirements will apply is to go through the Self-Environmental Assessment in the Michigan Guide to Environmental, Health, and Safety Regulations, online at: Michigan.gov/EHSguide. Please call the Environmental Assistance Center at 800-662-9278 to talk with any of the EGLE programs noted below. [insertions and edits by Union Township]

How Do I Know that I Need a State of Michigan, County or Local Permit or Approval?	**Yes** ☐	**No** ☐
1) Will your business involve the installation or construction of any process equipment that has the potential to emit air contaminants (e.g. dry sand blasting, boilers, standby generators)? Air Quality Permit to Install, Air Quality Division (AQD), Permit Section	Y☐	N☒
2) Does the project involve renovating or demolishing all or portions of a building? Notification is required for asbestos removal and required for all demolitions even if the structure never contained asbestos. Asbestos Notification, AQD, Asbestos Program, 517-284-6777	Y☐	N☒
3) Please consult the Permitting at the Land and Water Interface Decision Tree document to evaluate whether your project needs a land and water management permit (i.e., Does the project involve filling, dredging, placement of structures, draining, or use of a wetland?). Land and Water Featured Programs (Water Resources Division - WRD) - Joint Permit Application, 517-284-5567:		
a. Does the project involve construction of a building or septic system in a designated Great Lakes high risk erosion area?	Y☐	N☒
b. Does the project involve dredging, filling, grading, or other alteration of the soil, vegetation, or natural drainage, or placement of permanent structures in a designated environmental area?	Y☐	N☒
c. Does the project propose any development, construction, silvicultural activities or contour alterations within a designated critical dune area?	Y☐	N☒
d. Does the project involve construction of a dam, weir or other structure to impound flow?	Y☐	N☒
4) Does the project involve an earth change activity (including land balancing, demolition involving soil movement, and construction) or does the project involve construction which will disturb one or more acres that come into contact with storm water that enters a storm sewer, drain, lake, stream, or other surface water? **Union Township and Isabella County**	Y☒	N☐
5) Does the project involve the construction or alteration of a water supply system system? **Union Township Public Services Department** and Drinking Water & Environmental Health Division (DWEHD), 517-284-6524	Y☒	N☐
6) Does the project involve construction or alteration of any sewage collection or treatment facility? **Union Township Public Services Department** and WRD, Part 41 Construction Permit Program (staff), 906-228-4527, or EGLE District Office	Y☐	N☒
7) Public Swimming Pool Construction (Spas/Hot Tubs) Permits: Will your business involve the construction or modification of a public swimming pool, spa or hot tub? **Union Township** and Public Swimming Pool Program, 517-284-6541, or EGLE District Office	Y☐	N☒
8) Does the project involve the construction or modification of a campground? **Union Township** and DWEHD,Campgrounds program, 517-284-6529	Y☐	N☒

9) Does the project involve construction of a facility that landfills, transfers, or processes of any type of solid non-hazardous waste on-site, or places industrial residuals/sludge into or onto the ground? Materials Management Division (MMD), Solid Waste, 517-284-6588, or EGLE District Office	Y☐	N☒
10) Does the project involve the construction of an on-site treatment, storage, or disposal facility for hazardous waste? MMD, Hazardous Waste Section, Treatment, Storage and Disposal, 517-284-6562	Y☐	N☒
Who Regulates My Drinking (Potable) Water Supply?		
11) I am buying water from the municipal water supply system Contact the **Union Township Public Services Dept.**	Y☒	N☐
12) I have a Non-Community Water Supply (Type II) Guide, Contact (District or County) Local Health Department, 517-485-0660	Y☐	N☒
13) I am a community water supply (Type I) Community Water Supply, DWEHD District Office Community Water Supply Program, 517-284-6512	Y☐	N☒
14) Do you desire to develop a withdrawal of over 2,000,000 gallons of water per day from any source including groundwater, inland surface water, or the Great Lakes and their connecting waterways? WRD, Great Lakes Shorelands Unit, Water Use Program, 517-284-5563	Y☐	N☒
Who Regulates My Wastewater Discharge System?		
15) NPDES: Does the project involve the discharge of any type of wastewater to a storm sewer, drain, lake, stream, or other surface water? WRD, EGLE District Office, or National Pollutant Discharge Elimination (NPDES) Permit Program, 517-284-5568	Y☐	N☒
16) Does the facility have industrial activity that comes into contact with storm water that enters a storm sewer, drain, lake, stream, or other surface water? WRD, Permits Section, or EGLE District Office, 517-284-5588	Y☐	N☒
17) Does the project involve the discharge of wastewaters into or onto the ground (e.g. subsurface disposal or irrigation)? WRD, Groundwater Permits Program, 517-290-2570	Y☐	N☒
18) Does the project involve the drilling or deepening of wells for waste disposal? Oil, Gas and Minerals Division (OGMD), 517-284-6841	Y☐	N☒
What Operational Permits Are Relevant to My Operation and Air Emissions?		
19) Renewable Operating Permit: Does your facility have the potential to emit any of the following: 100 tons per year or more of any criteria pollutant; 10 tons per year or more of any hazardous air pollutant; or 25 tons per year or more of any combination of hazardous air pollutants? AQD, Permit Section, 517-284-6634	Y☐	N☒
20) Does your facility have an electric generating unit that sells electricity to the grid and burns a fossil fuel? AQD, Acid Rain Permit Program, 517-780-7843	Y☐	N☒
What Operational Permits Are Relevant to My Waste Management?		
21) Does the project involve landfilling, transferring, or processing of any type of solid non-hazardous waste on-site, or placing industrial residuals/sludge into or onto the ground? MMD, 517-284-6588 or EGLE District Office	Y☐	N☒
22) Does the project involve the on-site treatment, storage, or disposal of hazardous waste? MMD, Hazardous and Liquid Waste, 517-284-6562	Y☐	N☒
23) Does the project require a site identification number (EPA number) for regulated waste activities (used oil, liquid waste, hazardous waste, universal waste, PCBs)? (Hazardous Waste Program Forms & License Applications) MMD, EGLE District Office, 517-284-6562	Y☐	N☒

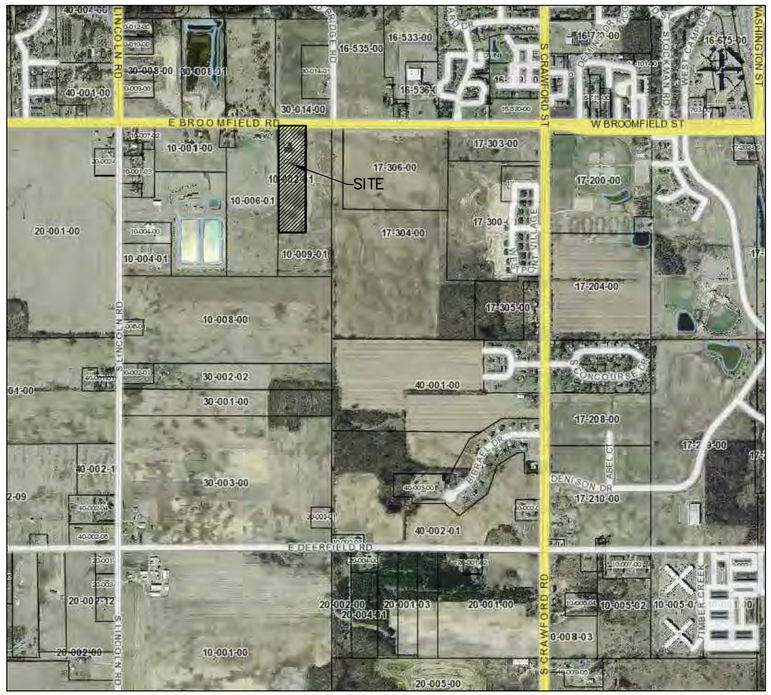
24) Does the project involve the receipt, possession, manufacture, use, storage, transport, transfer, release, or disposal of radioactive material in any form? MMD, Radioactive Material and Standards Unit, 517-284-6581	Y☐	N☒
25) Does the project involve decommissioning or decontamination of tanks, piping, and/or appurtenances that may have radioactive levels above background? MMD Radioactive Material and Standards Unit, 517-284-6581	Y☐	N☒
26) Does the project involve the generation of medical waste or a facility that treats medical waste prior to its disposal? MMD, Medical Waste Regulatory Program, 517-284-6594	Y☐	N☒
What Sector-Specific Permits May be Relevant to My Business?		
Transporters		
27) Does the project involve the *transport* of some other facility's non-hazardous liquid waste? MMD, Transporter Program, 517-284-6562	Y☐	N☒
28) Does the project involve the *transport* of hazardous waste? MMD, Transporter Program, 517-284-6562	Y☐	N☒
29) Do you engage in the business of transporting bulk water for drinking or household purposes (except for your own household use)? DWEHD, Water Hauler Information, 517-284-6527	Y☐	N☒
30) Does the project involve *transport* of septic tank, cesspool, or dry well contents or the discharge of septage or sewage sludge into or onto the ground? DWEHD, Septage Program, 517-284-6535	Y☐	N☒
31) Do you store, haul, shred or process *scrap tires*? MMD, Scrap Tire Program, 517-284-6586	Y☐	N☒
Sectors		
32) Is the project a *dry cleaning* establishment utilizing perchloroethylene or a flammable solvent in the cleaning process? AQD, Dry Cleaning Program, 517-284-6780	Y☐	N☒
33) Does your *laboratory* test potable water as required for compliance and monitoring purposes of the Safe Drinking Water Act? Laboratory Services Certifications, 517-284-5424	Y☐	N☒
34) Does the project involve the operation of a *public swimming pool*? DWEHD, Public Swimming Pools Program, 517-284-6529	Y☐	N☒
35) Does the project involve the operation of a *campground*? **Union Township** and DWEHD, Campgrounds, 517-284-6529	Y☐	N☒
What Permits Do I Need to Add Chemicals to Lakes and Streams?		
36) Are you applying a chemical treatment for the purpose of aquatic nuisance control (pesticide/herbicide etc.) in a water body (i.e. lake, pond or river)? WRD, Aquatic Nuisance Control , 517-284-5593	Y☐	N☒
37) Are you applying materials to a water body for a water resource management project (i.e. mosquito control treatments, dye testing, or fish reclamation projects)? WRD, Surface Water Assessment Section, 517-331-5228	Y☐	N☒

Why would I be subject to Oil, Gas and Mineral Permitting?		
38) Do you want to operate a central production facility (applies to oil and gas production facilities where products of diverse ownership are commingled)? OGMD, Petroleum Geology and Production Unit, 517-284-6826	Y☐	N☒
39) Does the project involve the removal of sand from a sand dune area within two (2) miles of a Great Lakes shoreline? OGMD, Minerals and Mapping Unit, Sand Dune Mining Program, 517-284-6826	Y☐	N☒
40) Does the project involve decommissioning or decontamination of tanks, piping, and/or appurtenances that may have radioactive levels above background? MMD, Radioactive Protection Programs, 517-284-6581	Y☐	N☒
Petroleum & Mining, OGMD, 517-284-6826		
41) Does the project involve the diversion and control of water for the mining and processing of low-grade iron ore?	Y☐	N☒
42) Does the project involve the surface or open-pit mining of metallic mineral deposits?	Y☐	N☒
43) Does the project involve the mining of nonferrous mineral deposits at the surface or in underground mines?	Y☐	N☒
44) Does the project involve mining coal?	Y☐	
45) Does the project involve changing the status or plugging of a mineral well?	Y☐	N☒
46) Does the project involve the drilling or deepening of wells for brine production, solution mining, storage, or as test wells?	Y☐	N☒

Contact **Union Township** and EGLE Permits & Bonding, OGMD, 517-284-6841

McGUIRK'S BROOMFIELD ROAD DEVELOPMENT

CONSTRUCTION PLAN



LOCATION MAP
SCALE: NONE

ZONED B-4 GENERAL BUSINESS	
MINIMUM LOT AREA	12,000 SQ. FT.
MINIMUM LOT WIDTH	80 FT
MAXIMUM STRUCTURE HEIGHT	35 FT
MINIMUM FRONT YARD SETBACK	50 FT (A) *
MINIMUM SIDE YARD SETBACK	20 FT (B) *
MINIMUM REAR YARD SETBACK	25 FT (B) *
MAXIMUM LOT COVERAGE	30% (BY ALL BLDGS.)

(A) Off-street parking shall be permitted to occupy a portion of the required front yard, provided that there shall be maintained a minimum landscape setback of ten (10) feet between the nearest point of the off-stree parking and the nearest point of the off-stree parking and the nearest road right-of-line as indicated on the master thoroughfare plan.

(B) A lot in the B-4 and B-5 District will provide a side and rear yard of at least forty (40) feet when abutting a residential District.

* Permitted Use Item H: Bowling alley, billiard hall, indoor archery range, indoor tennis courts, indoor skating rink, or similar forms of indoor commercial recreation when located at least one hundred (100) feet from any front, rear, or side yard of any residential lot in an adjacent residential District.

MISS DIG:

FOR PROTECTION OF UNDERGROUND UTILITIES, THE CONTRACTOR SHALL CALL "MISS DIG" 1-800-482-7171 A MINIMUM OF 3 WORKING DAYS PRIOR TO ANY EXCAVATION. ALL "MISS DIG" PARTICIPATING MEMBERS WILL BE APPROPRIATELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

UTILITY NOTE:

THE UTILITY LOCATIONS AS HEREON SHOWN ARE BASED ON FIELD OBSERVATIONS AND A CAREFUL REVIEW OF MUNICIPAL AND UTILITY COMPANY RECORDS. HOWEVER, IT IS NOT POSSIBLE TO DETERMINE THE PRECISE LOCATION AND DEPTH OF UNDERGROUND UTILITIES WITHOUT EXCAVATION. THEREFORE, WE CANNOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THE BURIED UTILITY INFORMATION HEREON SHOWN. THE CONTRACTOR SHALL CALL "MISS DIG" (1-800-282-7171) PRIOR TO ANY EXCAVATION. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THESE UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND SHALL MAKE EVERY EFFORT TO PROTECT AND OR RELOCATE THEM AS REQUIRED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER/SURVEYOR AS SOON AS POSSIBLE IN THE EVENT A DISCREPANCY IS FOUND. UNDERGROUND SERVICE LEADS FOR GAS, ELECTRIC, TELEPHONE AND CABLE MAY BE ACROSS PROPERTY, NO INFORMATION AVAILABLE PLEASE CALL MISS DIG.

LEGEND

SYMBOLS

O	BOLLARD	G	GAS RISER	SB	SOIL BORING
	CATCH BASIN (CURB INLET)		GUY ANCHOR	D	STORM SEWER MANHOLE
	CATCH BASIN (ROUND)		HYDRANT - EXISTING	T	TELEPHONE RISER
	CATCH BASIN (SQUARE)		HYDRANT - PROPOSED		TREE - CONIFEROUS
C	CLEAN OUT		LIGHT POLE		TREE - DECIDUOUS
	DRAINAGE FLOW		MAILBOX		UTILITY POLE
E	ELECTRICAL BOX	M	MONITORING WELL	WV	WATER MAIN VALVE
	FOUND CONC. MONUMENT	S	SANITARY SEWER MANHOLE		WATER SHUT-OFF
	FOUND IRON		SET IRON		FLOOD LIGHT
GV	GAS MAIN VALVE		SIGN	G	GAS METER

LINE TYPES

ELEC.	BURIED ELECTRICAL CABLE
PHONE	BURIED TELEPHONE CABLE
DITCH-CL	CENTERLINE OF DITCH
FM	FORCE MAIN
GAS	GAS MAIN
RD-CL	ROAD CENTERLINE
8" SAN	SANITARY SEWER
12" SS	STORM SEWER
EX-TOS	TOE OF SLOPE
EX-TOB	TOP OF BANK
OHE	UTILITIES - OVERHEAD
UTIL	UTILITIES - UNDERGROUND
12" WM	WATER MAIN

HATCH PATTERNS

	ASPHALT - EXISTING
	ASPHALT - PROPOSED
	CONCRETE
	GRAVEL
	LANDSCAPING
	RIP-RAP
	EXISTING BUILDING

SHEET INDEX

1	COVER SHEET
2	TOPOGRAPHIC SURVEY
3	SITE & HORIZONTAL PLAN
4	GRADING PLAN
5	SOIL EROSION PLAN
6	DETAILS
7	LANDSCAPING PLAN
8	BUILDING ELEVATIONS (BY OTHERS)
9	LIGHTING PLAN (BY OTHERS)

BEARING BASIS:
THE NORTH AND SOUTH 1/4 LINE BETWEEN THE INTERIOR 1/4 CORNER AND THE NORTH 1/4 CORNER WAS TAKEN AS N00°-47'-23"W FROM A PREVIOUS MID-MICHIGAN ENGINEERING SURVEY.

DESCRIPTION PROVIDED:
THE WEST 1/2 OF THE EAST 1/2 OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 28, T14N-R4W, UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN.

SITE: 2420 E. BROOMFIELD
MT. PLEASANT, MI 48858

OWNERS:
APPLICANT/OWNER 1
BROOMFIELD COMMONS CONOMINIUM ASSOCIATION
MT. PLEASANT, MI 48858
C/O McGUIRK MINI STORAGE, INC.
P.O. BOX 653
MT. PLEASANT, MI 48804
CONTACT: CHUCK McGUIRK
PHONE: (989) 772-1309
EMAIL: info@mcguirksand.com

APPLICANT/OWNER 2 AS TO UNIT A
IDFC INVESTMENTS LLC
1740 LEROY LANE
MT. PLEASANT, MI 48858
CONTANCT: JEREMY SHEETS
PHONE: 989-289-5100

APPLICANT/OWNER 4 AS TO UNIT C
MCGUIRK MINI STORAGE INC
P.O. BOX 530
MT. PLEASANT, MI 48804
CONTACT: CHUCK MCGUIRK
PHONE: 989-772-1309

CONSULTANT:
CENTRAL MICHIGAN SURVEYING & DEVELOPMENT CO., INC.
2257 EAST BROOMFIELD ROAD
MT. PLEASANT, MI 48858
CONTACT PERSON: TIMOTHY E BEBEE
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

CHARTER COMMUNICATIONS
915 E. BROOMFIELD ROAD
MT. PLEASANT, MI 48858
(989) 621-4932
RANDY BUNKER
rbunker@chartercom.com

CONSUMERS ENERGY
1325 WRIGHT AVENUE
ALMA, MI 48801
(989) 466-4282
KIM STUDT
kimberly.studt@cmsenergy.com

FRONTIER
345 PINE STREET
ALMA, MI 48801
(989) 463-0392
MARK A. MARSHALL
Mark.Marshall@ftr.com

DTE ENERGY
4420 44TH ST., S.E., SUITE B
KENTWOOD, MI 49512
(616) 954-4623
MARY JO MCKERSIE
mckersiem@dteenergy.com

MT. PLEASANT FIRE DEPARTMENT
804 EAST HIGH STREET
MT. PLEASANT, MI 48858
(989) 779-5100 EXT 5122
LT. RANDY KEELER
rkeeler@mt-pleasant.org

CHARTER TOWNSHIP OF UNION
PUBLIC WATER/PUBLIC SEWER
2010 N. LINCOLN ROAD
MT. PLEASANT, MI 48858
(989) 772-4600 EXT 24
KIM SMITH
ksmith@uniontownshipmi.com

CHARTER TOWNSHIP OF UNION
PLANNING & ZONING
2010 NORTH LINCOLN ROAD
MT. PLEASANT, MI 48858
(989) 772-4600 EXT 241
PETER GALLINAT
pgallinat@uniontownshipmi.com

DRAIN COMMISSIONERS OFFICE
ISABELLA COUNTY BUILDING
200 NORTH MAIN STREET ROOM 140
MT. PLEASANT, MI 48857
(989) 772-0911
ROBERT WILLOUGHBY
drain@isabellacounty.org

ISABELLA COUNTY ROAD COMMISSION
2261 EAST REMUS ROAD
MT. PLEASANT, MI 48858
(989) 773-7131 EXT 115
PATRICK GAFFNEY
PGaffney@isabellaroads.com

CMS & D
SURVEYING / ENGINEERING
2257 EAST BROOMFIELD ROAD
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

COVER SHEET

BROOMFIELD COMMONS CONDO ASSO.
PART OF THE NORTHWEST 1/4
SECTION 28, T.14 N.- R.04 W.
UNION TOWNSHIP, ISABELLA COUNTY
MICHIGAN

REVISIONS:

SUBMITTALS:
SUBMITTAL FOR CLIENT REVIEW 1-8-21
SUBMITTAL TO TWP PLANNING 4-26-21

JOB NUMBER: 2021-001
DRAWN BY: TELB
DESIGNED BY: TELB
CHECKED BY: TELB

SCALE: N/A
SHEET NUMBER: 1 OF 9

NORTH 1/4 CORNER,
SEC. 28, T14N–R4W
FOUND REMON. CORNER

N89°–28'–21"W 331.69'

NORTH SECTION LINE

PETERS EDWARD ET AL
14–028–10–009–01
ZONED B4 (NORTH 420 FEET OF PARCEL)

SPOIL PILE TO BE REMOVED
FROM NEIGHBORS PROPERTY

PETERS EDWARD ET AL
14–028–10–009–01
ZONED R1 (EXCEPT NORTH 420 FEET OF PARCEL)

REMOVE TREES
AS NEEDED
RECKER DRAIN
NO. 530

N00°–46'–24"W 1326.06'

SPOIL PILE TO BE
REMOVED

SPOIL PILE TO BE
REMOVED

20 SIDE YARD SETBACK

40 SIDE YARD SETBACK

40' REAR YARD SETBACK

OTTERBINE MICHAEL TRUST
14–021–30–014–00
ZONED B4

BROOMFIELD ROAD
(28' ASPHALT, 66' R–O–W)

S89°–28'–21"W 331.68'

REMOVE

L.C.D.C. RECKER (DRAIN)
LIBER 1052, PAGE 86

30 FRONT YARD SETBACK

UNIT A

EX–ASPHALT

McGUIRK MINI STORAGE, INC.
14–028–10–002–01
ZONED B4

HYDRANT TO BE
REMOVED AND
RELOCATED

EX. 12" WATERMAIN

EX–CONC.

EX–BLDG
F.F.= 701.89

EX–BLDG
F.F.= 709.00

UNIT B

UNIT C

40' CULVERT
INV= 696.23

24" CULVERT
INV= 696.10

24" CULVERT
INV= 696.30

38" X 60"
ELLIPTICAL
CULVERT
INV= 695.95

EX–ASPHALT

MONUMENT
SIGN

POWER
SUPPLY BOX

TELECOMM.
BOX

TELECOMM.
BOX

TRANS.
PAD

UGE

20 SIDE YARD SETBACK

TRANS.
PAD

GAS
RISER

S00°–45'–25"E 1325.26'

SPOIL PILE TO BE REMOVED

40 SIDE YARD SETBACK

PETERS EDWARD ET AL
14–028–10–009–01
ZONED R1 (EXCEPT NORTH 420 FEET OF PARCEL)

B. NELSON ENTERPRISES, INC.
14–028–10–006–01
ZONED B4 (NORTH 430 FEET OF PARCEL)

B. NELSON ENTERPRISES, INC.
14–028–10–006–01
ZONED R1 (EXCEPT NORTH 430 FEET OF PARCEL)

CONSUMERS ENERGY EASEMENT
LIBER 1718, PAGES 987–990

CONSUMERS POWER EASEMENT
LIBER 171, PAGES 632–633

15' PRIVATE EASEMENT
FOR PUBLIC UTILITIES

0 25 50 100

1 inch = 50 ft.

CMS & D
SURVEYING / ENGINEERING
2257 EAST BROOMFIELD ROAD
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775–0756
FAX: (989) 775–5012
EMAIL: info@cms–d.com

EXISTING TOPOGRAPHY
BROOMFIELD COMMONS CONDO ASSO.

PART OF THE NORTHWEST 1/4
SECTION 28, T.14 N.– R.04 W.
UNION TOWNSHIP, ISABELLA COUNTY
MICHIGAN

REVISIONS:

SUBMITTALS:
SUBMITTAL FOR CLIENT REVIEW 1–8–21
SUBMITTAL TO TWP PLANNING 4–26–21

SCALE	JOB NUMBER:	DESIGNED BY:	
1" = 50'	2021–001	TELB	
	DRAWN BY:	CHECKED BY:	
	TELB	TELB	
SHEET NUMBER			
2 OF 9			

PROJECT ENTRANCE AND PUBLIC SIDEWALKS

THE PROPOSED PROJECT IS MODIFYING THE MAIN ENTRANCE TO INCLUDE A BLVD STYLE ENTRANCE BASED ON COMMENTS FROM THE CITY OF MT. PLEASANT FIRE DEPARTMENT. ADDITIONALLY, THE PUBLIC SIDEWALK ALONG BROOMFIELD ROAD HAS BEEN SHOWN OUTSIDE OF THE EXISTING ROAD RIGHT-OF-WAY BASED ON COMMENTS FROM THE ISABELLA COUNTY ROAD COMMISSION. BROOMFIELD ROAD IS EXPECTED TO EXPAND AND THE SIDEWALK WILL NEED TO BE IN A SIDEWALK EASEMENT OUTSIDE OF THE ROAD RIGHT-OF-WAY.

PROJECT UTILITIES

THE CURRENT DEVELOPMENT HAS PRIVATE WATER AND SEWER SERVICES EXTENDED INTO THE SITE. THIS PRIVATE SERVICES EXTEND OUT TO BROOMFIELD ROAD AND TIE INTO THE PUBLIC SERVICE LINES. THE EXISTING PRIVATE SANITARY SEWER MAIN WILL NOT NEED TO BE EXTENDED. A PRIVATE LEAD WILL BE RUN TO THE PROPOSED 41,600 SF STRUCTURE. THE PRIVATE WATER MAIN AND FIRE HYDRANTS WILL NEED TO BE MODIFIED AS SHOWN ON THE PLANS. A DOMESTIC WATER SERVICE AND FIRE LINE WILL BE EXTENDED TO THE 41,600 SF STRUCTURE. THE SIZES OF EACH SHALL BE DETERMINED BY THE FIRE SUPPRESSION COMPANY AND ARCHITECT. BOTH WILL BE SHOWN ON THE BUILDING PLAN.

PROJECT DESCRIPTION

THE PROPOSED OVERALL DEVELOPMENT LIES WITHIN (3) CONDOMINIUM UNITS. EACH OWNER HAS PROPOSED THEIR OWN BUILDING OR BUILDING EXPANSION. EACH OWNER PROPOSES TO RETAIN THEIR STRUCTURE AND EITHER UTILIZE IT FOR THEIR OWN PURPOSES OR LEASE OUT SPACE TO OTHERS. THE MOST NORTHERLY STRUCTURES IS THE HOME OF CMS'S FIELD OPERATION AND THE PROPOSED STRUCTURE WILL BE AN EXPANSION OF THEIR OPERATION. THE MIDDLE STRUCTURE IS THE HOME OF THE CURRENT JUMP HOUSE. THE PROPOSED EXPANSION WILL BE AN 5,500 SF EXPANSION OF THEIR CURRENT SERVICES AND 6,000 SF OF LEASEABLE SPACE. THE SOUTHERLY STRUCTURE WILL BE LEASEABLE SPACE OWNED BY THE MCGUIRK COMPANIES.

PROJECT WASTE COLLECTION

THE PROPOSED PROJECT HAS (3) ENCLOSED DUMPSTER LOCATIONS SHOWN. ASSUMING THAT THE PRELIMINARY SITE PLAN IS APPROVED, DETAILS FOR THE DUMPSTER ENCLOSURES WILL BE INCLUDED IN THE SUBMITTAL OF THE FINAL SITE PLAN.

ZONING SUMMARY

FRONT YARD SETBACK 50 FT – MIN. DISTANCE TO PROP. STR. = 199.5'
SIDE YARD SETBACK 20 FT & 40 FT – MIN. DISTANCE TO PROP. STR. = 44.5' IN 20 FT AREA & 40.6' IN 40 FT AREA
SIDE YARD SETBACK 100 FT – SECTION 6.47 INDOOR COMMERCIAL RECREATION USES.
REAR YARD SETBACK 25 FT – MIN. DISTANCE TO PROP. STR. = 47.3'
LOT FRONTAGE MIN. 80 FT – 331.5'
LOT AREA MIN. 12,000 SF – 10.1 ACRES
BUILDING HEIGHT – ALL EXISTING & PROPOSED STR. ARE LESS THAN 35'
LOT COVERAGE 30 PERCENT = 131,987 SF – 75,900 SF

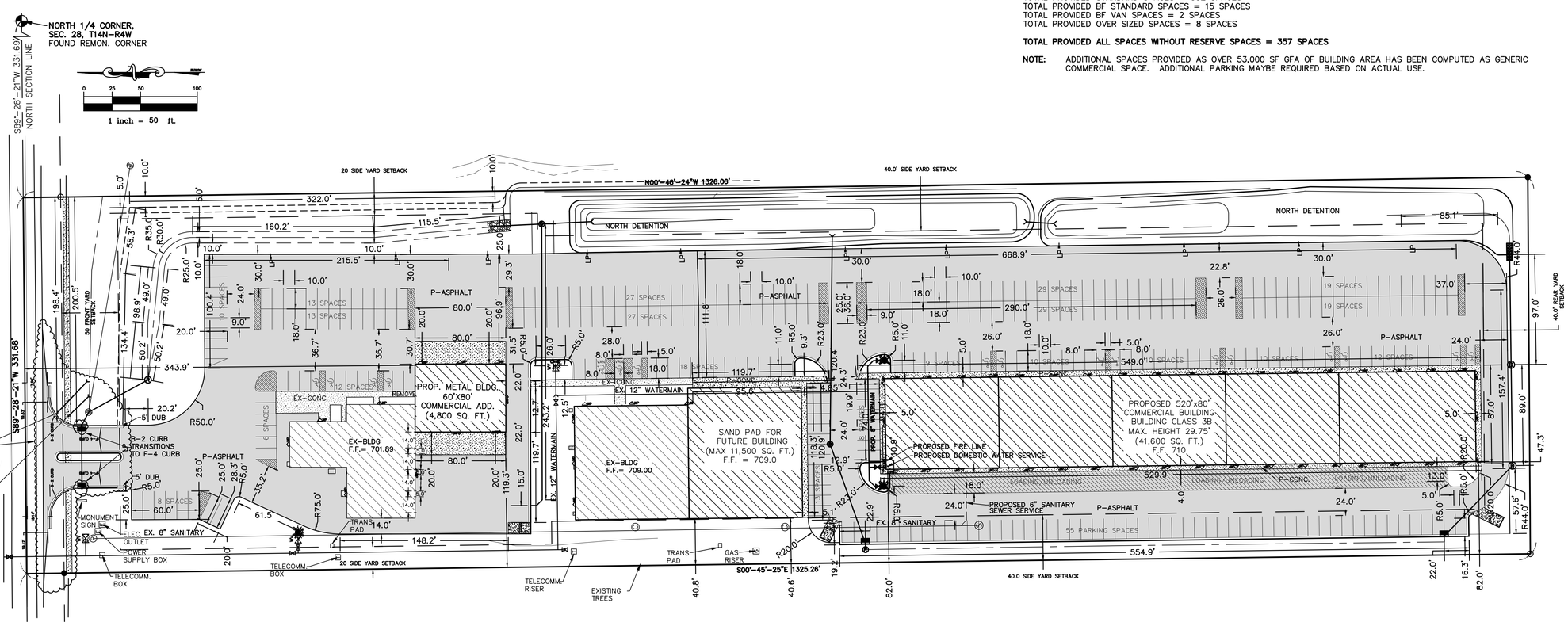
PARKING CALCULATIONS:

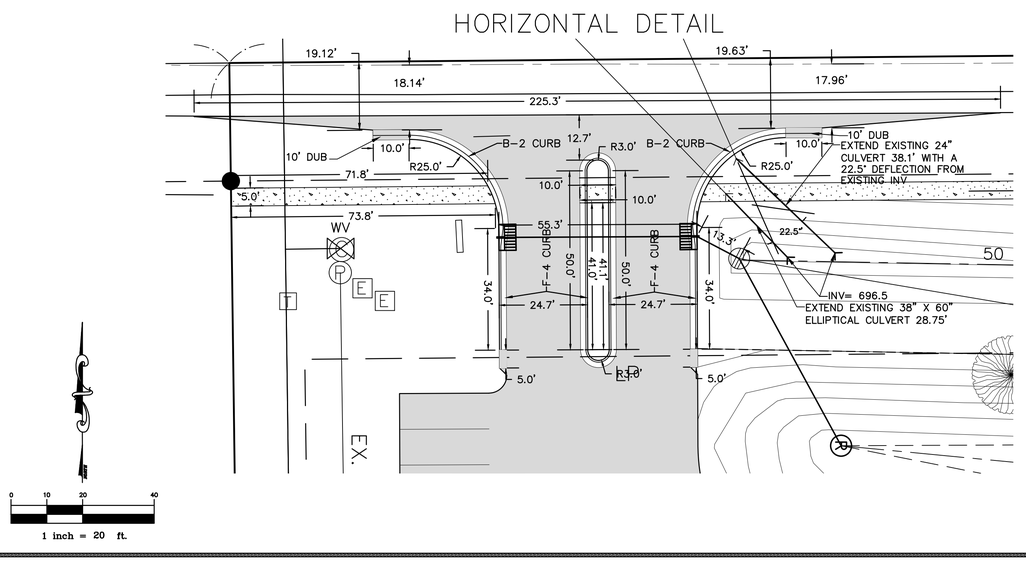
- PROPOSED 41,600 SF GFA STRUCTURE @ 80% USEABLE = 33,280 SF UFA @ 1 SPACE PER 250 SF = 133 SPACES
- EXISTING 10,000 SF GFA @ 5.8 SPACES PER 1,000 SF GFA = 58 SPACES
- PROPOSED 11,500 SF STRUCTURE
  - 6,000 SF GFA @ 80% USEABLE = 4,800 SF @ 1 SPACE PER 250 SF UFA = 19 SPACES
  - 5,500 SF GFA @ 5.8 SPACES PER 1,000 SF GFA = 32 SPACES
- EXISTING 8,000 SF GFA STRUCTURE
  - 1,440 SF GFA OFFICE @ 2.39 SPACES PER 1,000 SF GFA = 4 SPACES
  - 6,560 SF GFA @ 80% USEABLE = 5,248 SF UFA @ 1 SPACE PER 250 SF UFA = 21 SPACES
- PROPOSED 4,800 GFA @ 80% USEABLE = 3,840 SF UFA @ 1 SPACE PER 250 SF UFA = 16 SPACES

TOTAL REQUIRED SPACES = 283 SPACES OF WHICH A MINIMUM OF 7 STANDARD AND 1 VAN BF SHALL BE PROVIDED
TOTAL PROVIDED STANDARD SPACES = 332 SPACES
TOTAL PROVIDED BF STANDARD SPACES = 15 SPACES
TOTAL PROVIDED BF VAN SPACES = 2 SPACES
TOTAL PROVIDED OVER SIZED SPACES = 8 SPACES

TOTAL PROVIDED ALL SPACES WITHOUT RESERVE SPACES = 357 SPACES

NOTE: ADDITIONAL SPACES PROVIDED AS OVER 53,000 SF GFA OF BUILDING AREA HAS BEEN COMPUTED AS GENERIC COMMERCIAL SPACE. ADDITIONAL PARKING MAYBE REQUIRED BASED ON ACTUAL USE.





CMS & D
SURVEYING / ENGINEERING
2257 EAST BROOMFIELD ROAD
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

HORIZONTAL LAYOUT

BROOMFIELD COMMONS CONDO ASSO.
PART OF THE NORTHWEST 1/4
SECTION 28, T.14 N.– R.04 W.
UNION TOWNSHIP, ISABELLA COUNTY
MICHIGAN

REVISIONS:

SUBMITTALS:
SUBMITTAL FOR CLIENT REVIEW 1-8-21
SUBMITTAL TO TWP PLANNING 4-26-21

JOB NUMBER: 2021-001
DRAWN BY: TELB
DESIGNED BY: TELB
CHECKED BY: TELB

SCALE 1" = 50'

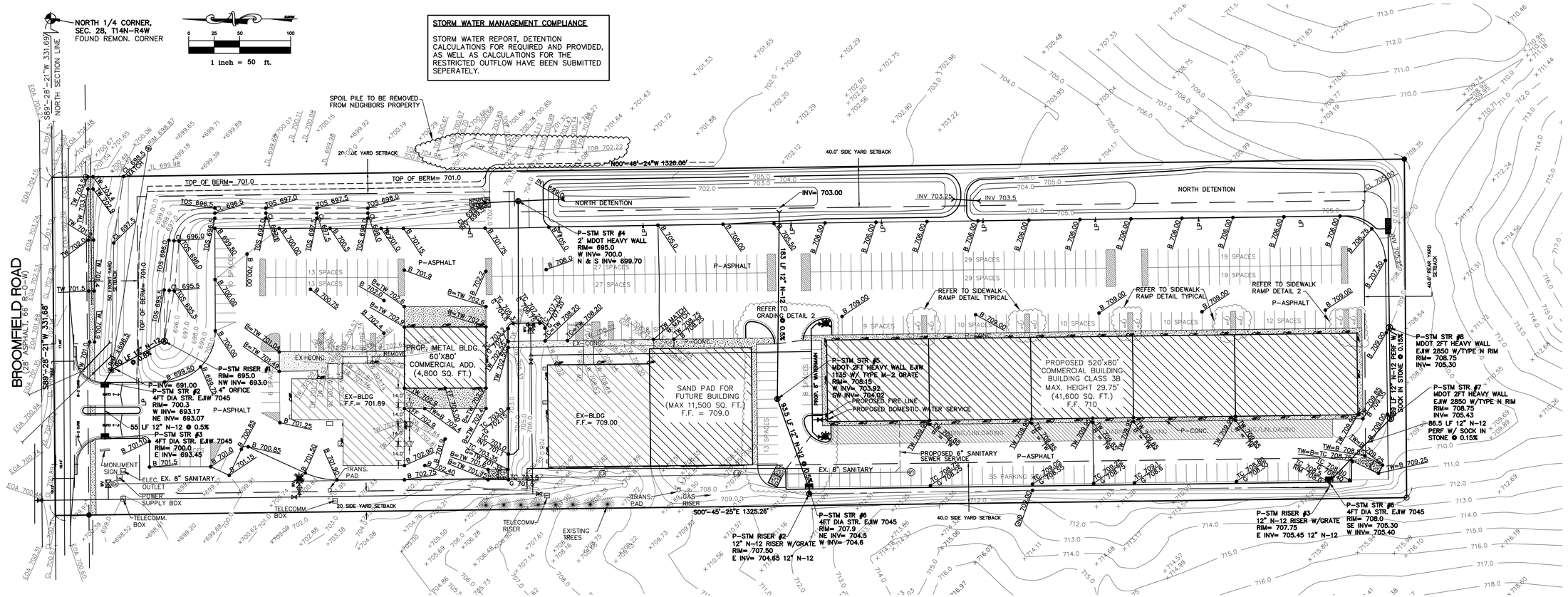
SHEET NUMBER 3 OF 9

NORTH 1/4 CORNER,
SEC. 28, T14N–R4W
FOUND REMON. CORNER

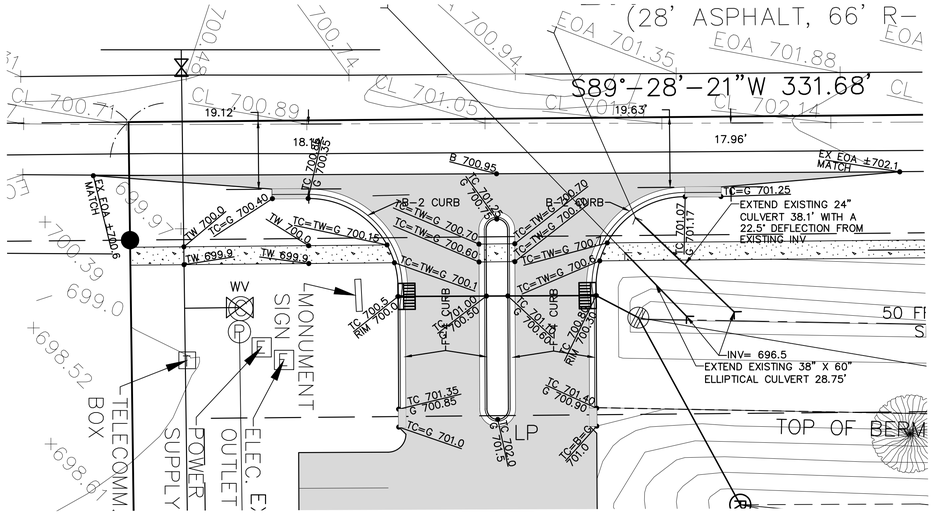
0 25 50 100
1 inch = 50 ft.

STORM WATER MANAGEMENT COMPLIANCE

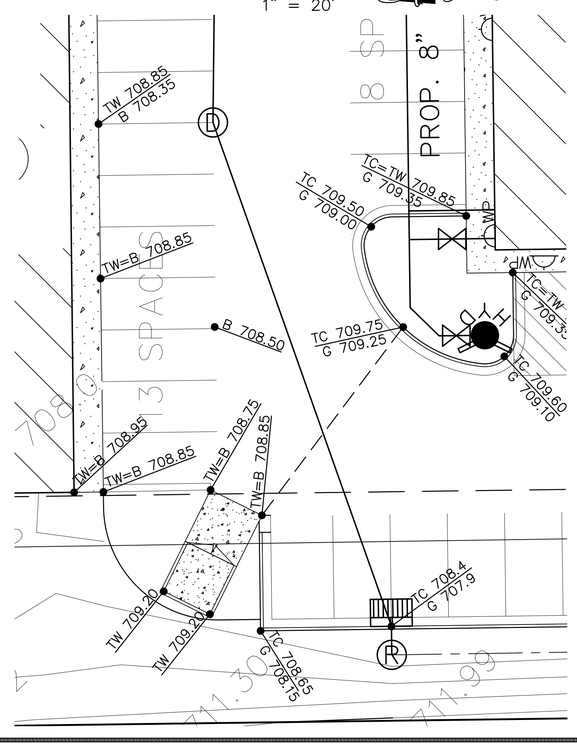
STORM WATER REPORT, DETENTION CALCULATIONS FOR REQUIRED AND PROVIDED, AS WELL AS CALCULATIONS FOR THE RESTRICTED OUTFLOW HAVE BEEN SUBMITTED SEPERATELY.



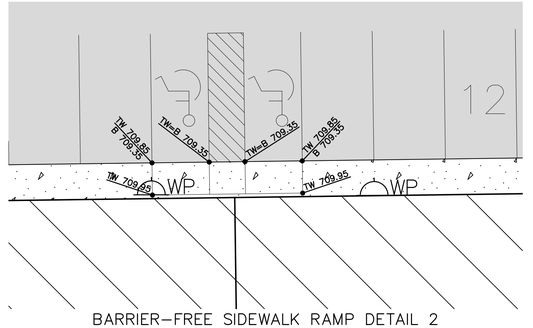
GRADING DETAIL 1
SCALE
1" = 30'



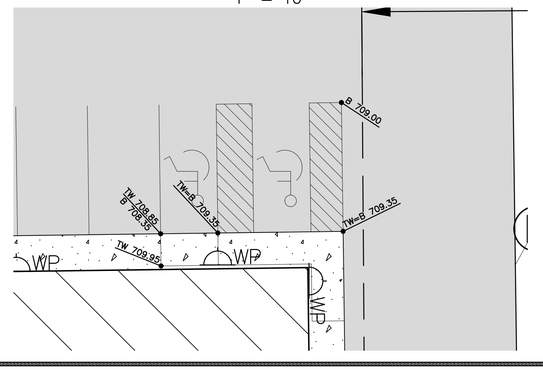
GRADING DETAIL 2
SCALE
1" = 20'



BARRIER–FREE SIDEWALK RAMP DETAIL
TYPICAL
SCALE
1" = 10'



BARRIER–FREE SIDEWALK RAMP DETAIL 2
SCALE
1" = 10'



CMS & D
SURVEYING / ENGINEERING
2257 EAST BROOMFIELD ROAD
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

GRADING PLAN

BROOMFIELD COMMONS CONDO ASSO.

PART OF THE NORTHWEST 1/4
SECTION 28, T.14 N.– R.04 W.
UNION TOWNSHIP, ISABELLA COUNTY
MICHIGAN

REVISIONS:

SUBMITTALS:
SUBMITTAL FOR CLIENT REVIEW 1-8-21
SUBMITTAL TO TWP PLANNING 4-26-21

JOB NUMBER: 2021-001
DRAWN BY: TELB
DESIGNED BY: TELB
CHECKED BY: TELB

SCALE 1" = 50'

SHEET NUMBER 4 OF 9

MICHIGAN UNIFIED KEYING SYSTEM

XP
XT

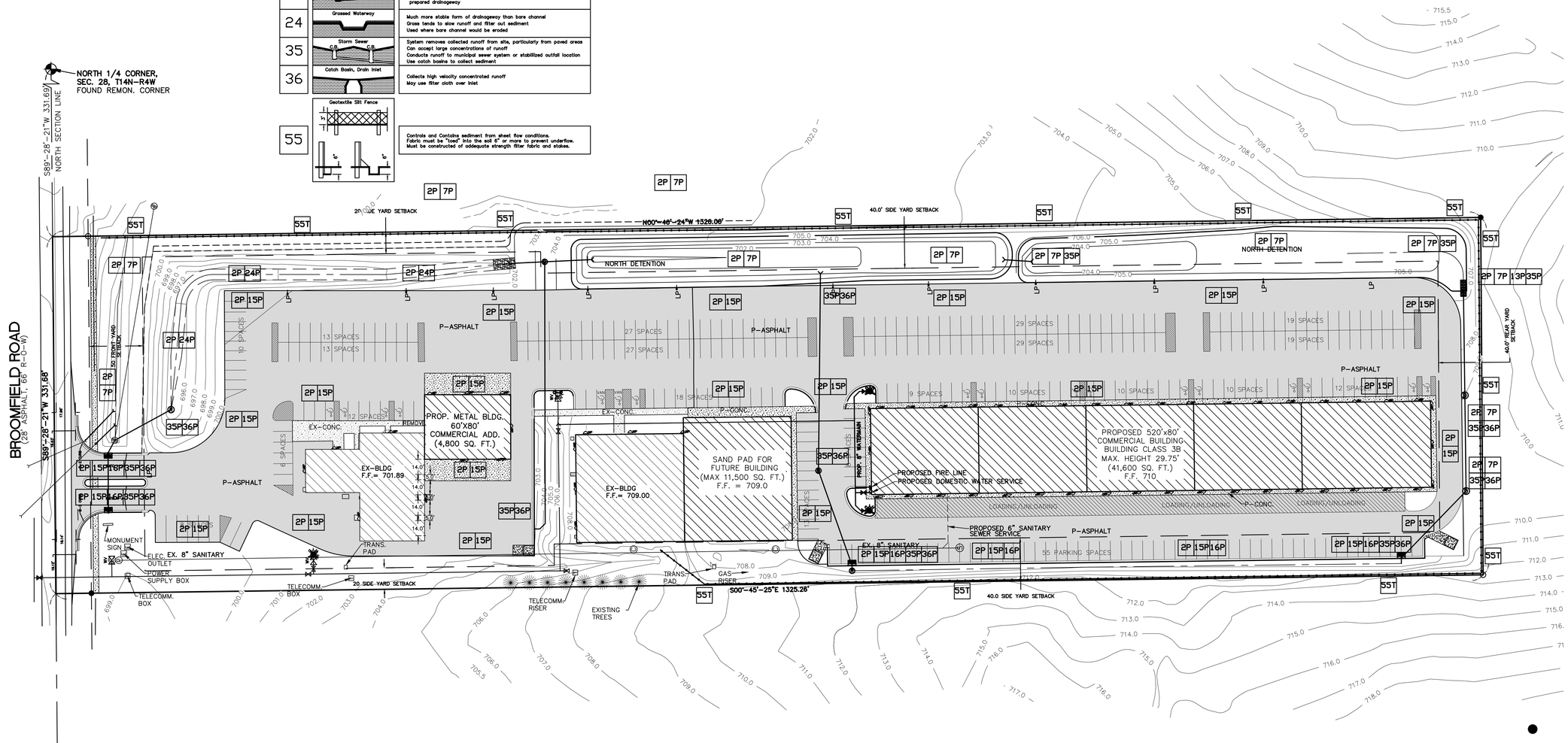
SOIL EROSION & SEDIMENTATION CONTROL MEASURES

P = PERMANENT T = TEMPORARY

MICHIGAN UNIFIED KEYING SYSTEM

SOIL EROSION & SEDIMENTATION CONTROL MEASURES

KEY	DETAIL	CHARACTERISTICS
2	Selective Grading & Shaping	Water can be diverted to minimize erosion Flatter slopes ease erosion problems
7	Hydro-seeding	Effective on large areas Mulch tacking agent used to provide immediate protection until grass is rooted Should include prepared topsoil bed
13	Riprap, Rubble, Gabions	Used where vegetation is not easily established Effective for high velocities or high concentration Permits runoff to infiltrate soil Dissipates energy flow at system outlets
15	Paving	Protects areas which cannot otherwise be protected, but increases runoff volume and velocity Irregular surface will help slow velocity
16	Curb & Gutter	Keeps high velocity runoff on paved areas from leaving paved surface Collects and conducts runoff to enclosed drainage system or prepared drainageway
24	Grassed Waterway	Much more stable form of drainageway than bare channel Grass tends to slow runoff and filter out sediment Used where bare channel would be eroded
35	Storm Sewer (C.B. C.B.)	System removes collected runoff from site, particularly from paved areas Can accept large concentrations of runoff Conducts runoff to municipal sewer system or stabilized outfall location Use catch basins to collect sediment
36	Catch Basin, Drain Inlet	Collects high velocity concentrated runoff May use filter cloth over inlet
55	Geotextile Silt Fence (3', 6", 6")	Controls and Contains sediment from sheet flow conditions. Fabric must be "toed" into the soil 6" or more to prevent underflow. Must be constructed of addequate strength filter fabric and stakes.



0 25 50 100

1 inch = 50 ft.

CMS & D
SURVEYING / ENGINEERING
2257 EAST BROOMFIELD ROAD
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

SOIL EROSION PLAN

BROOMFIELD COMMONS CONDO ASSO.

PART OF THE NORTHWEST 1/4
SECTION 28, T.14 N.- R.04 W.
UNION TOWNSHIP, ISABELLA COUNTY
MICHIGAN

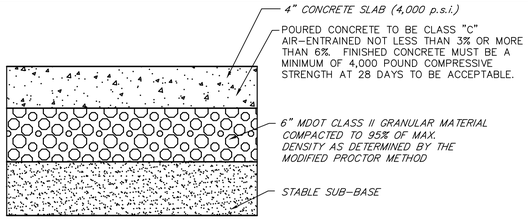
REVISIONS:

SUBMITTALS:
SUBMITTAL FOR CLIENT REVIEW 1-8-21
SUBMITTAL TO TWP PLANNING 4-26-21

JOB NUMBER: 2021-001
DRAWN BY: TELB
DESIGNED BY: TELB
CHECKED BY: TELB

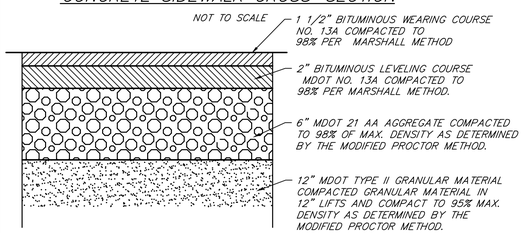
SCALE 1" = 50'

SHEET NUMBER 5 OF 9



CONCRETE SIDEWALK CROSS-SECTION

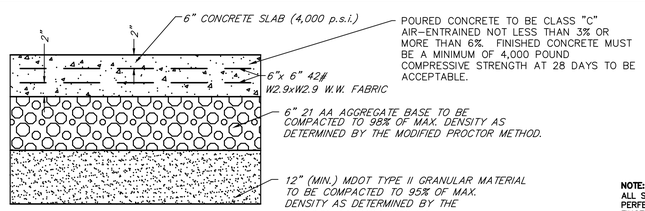
NOT TO SCALE



NOTE: COMPACTION TESTS ARE REQUIRED. RESULTS SHALL BE SUBMITTED TO OWNER PRIOR TO FINAL ACCEPTANCE OF SUB-BASE, BASE AND ASPHALT MATERIALS.

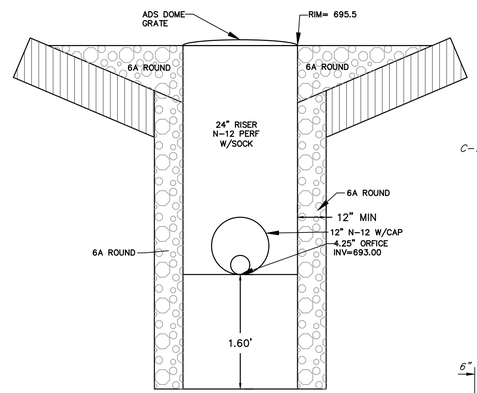
PARKING LOT ASPHALT PAVEMENT CROSS-SECTION

NOT TO SCALE



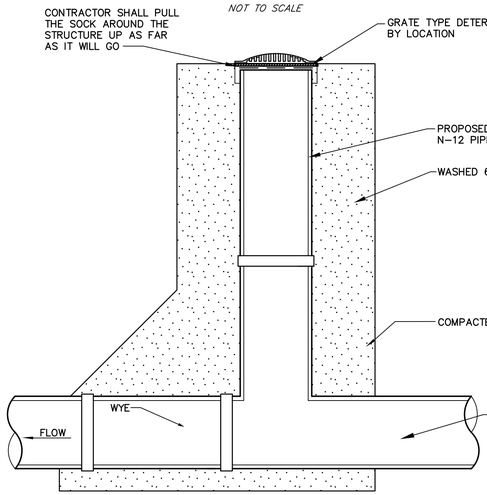
CONCRETE PAD CROSS-SECTION

NOT TO SCALE



P-STM RISER #1 DETAIL

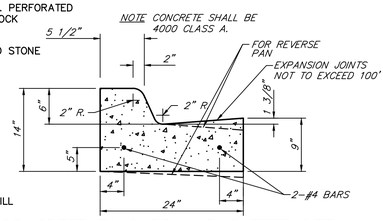
NOT TO SCALE



* GUTTER PAN WITH MAY BE REDUCED WHEN APPROVED BY THE ENGINEER.

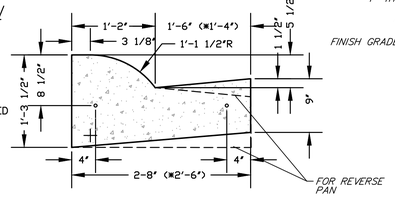
DRAINAGE RISER DETAIL

NOT TO SCALE



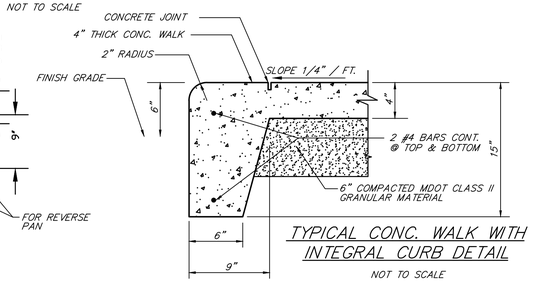
CONCRETE F4 CURB AND GUTTER DETAIL REVERSE AND STANDARD PAN

NOT TO SCALE



M.D.O.T. B-2 CURB

NOT TO SCALE



TYPICAL CONC. WALK WITH INTEGRAL CURB DETAIL

NOT TO SCALE

CONCRETE SLAB. PROVIDE 1.5 LBS/YD FIBERGLASS FIBER REINFORCING IN CONCRETE IN ADDITION TO (2) 6"x 6" 4.2# W2.9xW2.9 W.W. FABRIC. POURED CONCRETE TO BE CLASS C AIR-ENTRAINED NOT LESS THAN 3% OR MORE THAN 6%. FINISHED CONCRETE MUST BE A MINIMUM OF 4000 POUND COMPRESSIVE STRENGTH AT 28 DAYS TO BE ACCEPTABLE.

NOTE:

BOLLARDS TO BE 6" DIA. STEEL PIPE FILLED WITH CONCRETE & PAINTED SAFETY YELLOW. THE TOP & THE BASE OF THE PIPE TO HAVE 1" MINIMUM CROWN. PIPES TO EXTEND A MINIMUM OF 3 FEET BELOW FINISHED SURFACE.

6" (MIN.) CRUSHED AGGREGATE BASE M.D.O.T. 21AA CRUSHED LIMESTONE TO BE COMPACTED TO 98% OF MAX. DENSITY AS DETERMINED BY THE MODIFIED PROCTOR METHOD.

12" (MIN.) MDOT CLASS II SAND TO BE COMPACTED TO 95% OF MAX. DENSITY AS DETERMINED BY THE MODIFIED PROCTOR METHOD.

DUMPSTER PAD ENCLOSURE

NOT TO SCALE

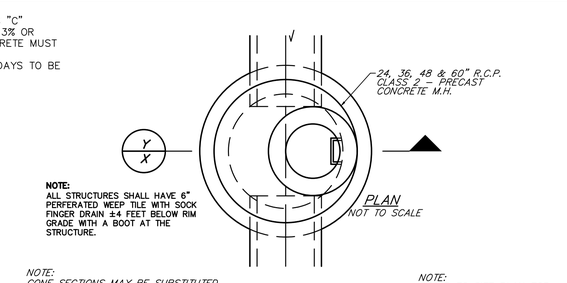
TYP. BARRIER FREE PARKING SIGN

NOT TO SCALE

PAINT FOR PARKING SLOTS, ARROWS, AND ISLANDS SHALL BE MDOT APPROVED TRAFFIC MARKING PAINT

BARRIER FREE PARKING SPACES

NOT TO SCALE

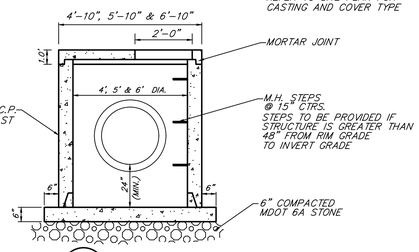


NOTE:
ALL STRUCTURES SHALL HAVE 6" PERFERATED WEEP TILE WITH SOCK FINGER DRAIN ±4 FEET BELOW RIM GRADE WITH A BOOT AT THE STRUCTURE.

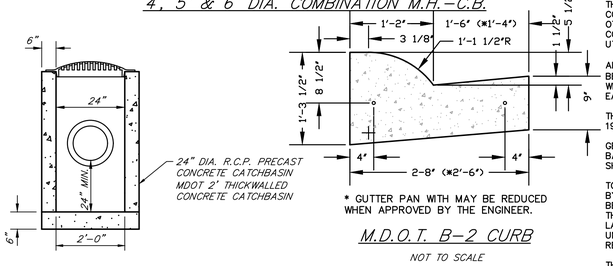
PLAN
NOT TO SCALE

NOTE: CONE SECTIONS MAY BE SUBSTITUTED WHERE DEPTH ALLOWS

NOTE: REFER TO SITE PLAN FOR CASTING AND COVER TYPE



4', 5' & 6' DIA. COMBINATION M.H.-C.B.



2' DIA. CATCH BASIN DETAIL

NOT TO SCALE

* GUTTER PAN WITH MAY BE REDUCED WHEN APPROVED BY THE ENGINEER.

M.D.O.T. B-2 CURB

NOT TO SCALE

GENERAL NOTES:

THE SANITARY SEWER AND WATERMAIN MUST CONFORM TO THE UNION TOWNSHIP STANDARDS AND SPECIFICATIONS. SHOULD THERE BE A CONFLICT BETWEEN THE PLANS, NOTES, DETAILS AND SPECIFICATIONS, THE UNION TOWNSHIP STANDARDS SHALL GOVERN. THE CONTRACTOR WILL NOTIFY THE ENGINEER AS SOON AS A CONFLICT IS FOUND. INSTALLATION OF THESE UTILITIES SHALL BE COORDINATED BY THE CONTRACTOR WITH THE UNION TOWNSHIP DEPARTMENT OF PUBLIC WORKS.

ELECTRIC SERVICES TO THE BUILDING AND PARKING LOT LIGHTING SHALL BE UNDERGROUND. SITE CONTRACTOR SHALL COORDINATE WITH THE ELECTRICAL CONTRACTOR IN REGARDS TO CONDUIT SLEEVES.

ALL SERVICE LINES ARE SHOWN FOR REFERENCE ONLY. THE EXACT LOCATIONS TO BE DETERMINED BY THE OWNER AND/OR UTILITY COMPANY.

INSTALLATION OF GAS, ELECTRIC AND TELEPHONE SERVICES (INCLUDING TRANSFORMER PAD LOCATIONS) SHALL BE COORDINATED BY THE CONTRACTOR WITH THE RESPECTIVE UTILITY COMPANIES AND THE ARCHITECT/ENGINEER

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL CONSTRUCTION PERMITS REQUIRED FOR WORKING WITHIN THE ROAD RIGHT-OF-WAY PRIOR TO COMMENCING CONSTRUCTION, WITHIN THESE AREAS.

ROOF WATER FROM THE PROPOSED BUILDING SHALL BE COLLECTED AND CONNECTED TO THE PROPOSED HEADERS AND/OR LEADS ALONG THE BUILDING. COORDINATION WITH THE BUILDING CONTRACTOR PRIOR TO INSTALLATION OF THE HEADERS AND/OR LEADS IS REQUIRED.

THE PROPOSED ELEVATIONS SHOWN ARE TOP OF WALK, TOP OF CURB, FINISHED ASPHALT SURFACE AND GUTTER PAN ELEVATIONS, UNLESS OTHERWISE NOTED.

ALL DRIVEWAY APPROACHES SHALL BE CONSTRUCTED IN ACCORDANCE UNION TOWNSHIP STANDARDS.

CONSTRUCTION PROCEDURES SHALL CONFORM TO THE REQUIREMENTS OF THE STATE OF MICHIGAN, COUNTY OF ISABELLA AND UNION TOWNSHIP.

SITE CONCRETE PADS SHALL BE 4000 PSI AND REINFORCED WITH 6X6 W2.9 X W2.9. THICKNESS OF CONCRETE SHALL CONFORM TO THE PLANS. THE CONCRETE PADS ADJACENT TO THE BUILDING SHALL BE TAKEN OFF FROM THE ARCHITECTURAL PLANS AND THE CONSTRUCTION OF THE PADS SHALL BE COORDINATED WITH THE BUILDING CONTRACTOR.

DIMENSIONS SHOWN ON THE PLANS ARE GIVEN TO THE BACK OF CURB, FACE OR BACK OF WALK OR THE BUILDING OUTSIDE LINES.

STANDARD PARKING SPACES SHALL BE 10 FEET BY 20 FEET. THE SPACES ARE TO BE INDICATED BY 4 INCH WIDE WHITE LINES. THE PAINT LINES ON THE SITE, EXCEPT NEAR THE BUILDING, SHALL CONFORM TO THE ENGINEER'S PLAN.

CONCRETE CURBING SHALL BE 4000 PSI CONCRETE.

ALL ABANDONED CURB STOP BOXES SHALL BE REMOVED AND SALVAGED.

GENERAL NOTES:

THE UTILITY LOCATIONS AS HEREON SHOWN ARE BASED ON FIELD OBSERVATIONS AND A CAREFUL REVIEW OF MUNICIPAL AND UTILITY COMPANY RECORDS. HOWEVER, IT IS NOT POSSIBLE TO DETERMINE THE PRECISE LOCATION AND DEPTH OF UNDERGROUND UTILITIES WITHOUT EXCAVATION. THEREFORE, WE CANNOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THE BURIED UTILITY INFORMATION HEREON SHOWN. THE CONTRACTOR SHALL CALL "MISS DIG" (1-800-482-7171) A MINIMUM OF 3 WORKING DAYS PRIOR TO ANY CONSTRUCTION OR PRIOR TO ANY EXCAVATION. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THESE UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND SHALL MAKE EVERY EFFORT TO PROTECT AND OR RELOCATE THEM AS REQUIRED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER/SURVEYOR AS SOON AS POSSIBLE IN THE EVENT A DISCREPANCY IS FOUND. THE CONTRACTOR SHALL NOTIFY THE ENGINEER/SURVEYOR WHERE POSSIBLE CONFLICTS EXIST PRIOR TO BEGINNING CONSTRUCTION.

THE LOCATION OF EXISTING UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL FIELD VERIFY GROUND CONDITIONS, EXISTING UTILITIES, LOT AND BUILDING DIMENSIONS PRIOR TO THE START OF CONSTRUCTION. THERE MAY BE OTHER UTILITIES NOT SHOWN ON THE PLANS. ARRANGE TO HAVE UTILITIES IDENTIFIED AND FLAGGED BEFORE STARTING CONSTRUCTION. THE OWNER ASSUMES NO LIABILITY FOR THE LOCATION OF UTILITIES. ALL DAMAGES MADE TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

ALL CONSTRUCTION UNDER EXISTING OR PROPOSED PAVEMENT, EXISTING OR PROPOSED UTILITIES (INCLUDING LEADS), SHALL BE COMPLETELY BACKFILLED WITH SAND IN 12" LAYERS, AND COMPACTED TO NOT LESS THAN 95% OF ITS MAXIMUM UNIT WEIGHT, AS DETERMINED BY THE MODIFIED PROCTOR METHOD. THE COST IS TO BE INCLUDED IN THE UNIT PRICE BID FOR EACH ITEM.

THE CONTRACTOR SHALL CONFORM TO SOIL EROSION AND SEDIMENTATION CONTROL ACT PART 91 OF PUBLIC ACT 451 OF 1994, AS AMENDED.

GEOTEXTILE FILTER BAGS SHALL BE USED AT ALL CATCH BASINS FOR SOIL AND SEDIMENTATION CONTROL. ALL CATCH BASINS SHALL BE CLEANED UPON COMPLETION OF THE PROPOSED PROJECT. COST FOR CLEANING THE CATCH BASINS SHALL BE INCLUDED IN THE COSTS FOR THE DRAINAGE STRUCTURES.

TOPSOIL SHALL BE STOCKPILED ON THE SITE AND USED AS TOPSOIL SURFACES AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. TOPSOIL WILL NEED TO BE SPREAD IN THE BASIN AREA TO A MINIMUM DEPTH OF 6 INCHES. THE BERMS SHOWN ON THE PLANS WILL NEED TO BE TOPSOIL OR TO HAVE A MINIMUM OF 6 INCHES ON TOPSOIL SPREAD OVER THEM. THE CURB ISLANDS WILL BE FILLED AS SPECIFIED WITH TOPSOIL. THE INTENT IS FOR THE CONTRACTOR AND THE LANDSCAPER TO USE THE EXISTING TOPSOIL TO COMPLETE THE PROJECT PRIOR TO HAULING ANY TOPSOIL ONTO THE SITE. UNSUITABLE TOPSOILS MUST BE DISPOSED OF. DURING THE CLEANUP, ANY REMAINING STOCKPILES WILL NEED TO BE REMOVED. SOIL EROSION MEASURES MUST BE TAKEN TO ASSURE THAT THESE STOCKPILES ARE STABILIZED.

THE CONTRACTOR SHALL SEED AND FERTILIZE DITCH BANKS, SOILS PILES OR BANKS AND ANY OTHER DISTURBED AREAS AS SHOWN ON THE PLANS AND/OR DESCRIBED IN THE SPECIFICATIONS.

THE CONTRACTOR SHALL BACKFILL, COMPACT AND FINE GRADE ALL AREAS BETWEEN THE CURBS AND PAVEMENT AND THE PROPERTY LINES WITH TOPSOIL SUITABLE FOR LANDSCAPING. THE GRADES IN THESE AREAS WILL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

THE UNPAVED AREAS SHALL BE SMOOTHLY GRADED AND THE SURFACE STABILIZED BY SEEDING AS STATED ON THE PLANS. THE MAXIMUM DESIRABLE SLOPE IS 3 HORIZONTAL TO 1 VERTICAL, UNLESS OTHERWISE STATED.

THE CONTRACTOR SHALL FURNISH AND INSTALL PLAIN RIP-RAP BANK PROTECTION IN AREAS WHERE BANK EROSION WILL MOST LIKELY OCCUR OR AS DIRECTED BY THE ENGINEER.

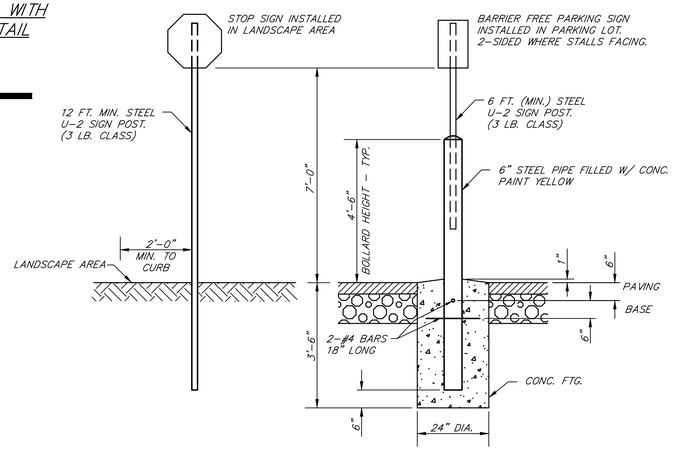
BROKEN CONCRETE AND DEBRIS SHALL BE CONSIDERED WASTE TO BE DISPOSED OF BY THE CONTRACTOR.

ALL DEWATERING REQUIRED FOR CONSTRUCTION SHALL BE INCLUDED IN THE UNIT PRICE BID.

ALL JOINTS AT INTERSECTION APPROACHES AND DRIVEWAYS SHALL BE SAWCUT WITH BUTT-JOINTS. THE COST SHALL BE INCLUDED WITH THE PAYMENT FOR EXCAVATION.

THE CONTRACTOR SHALL MAINTAIN LOCAL TRAFFIC AT ALL TIMES ON THE PROJECT. THE COST IS TO BE INCLUDED IN THE LUMP SUM FEE.

ALL WATER VALVE BOXES, ELECTRICAL BOXES, GAS VALVES AND ANY OTHER EXISTING UTILITY STRUCTURES ON THE SITE SHALL BE ADJUSTED TO FINISHED GRADE. THE COST SHALL BE INCLUDED IN THE LUMP SUM FEE.



PARKING LOT SIGN POST DETAILS

NOT TO SCALE

CMS & D
SURVEYING / ENGINEERING
2257 EAST BROOMFIELD ROAD
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

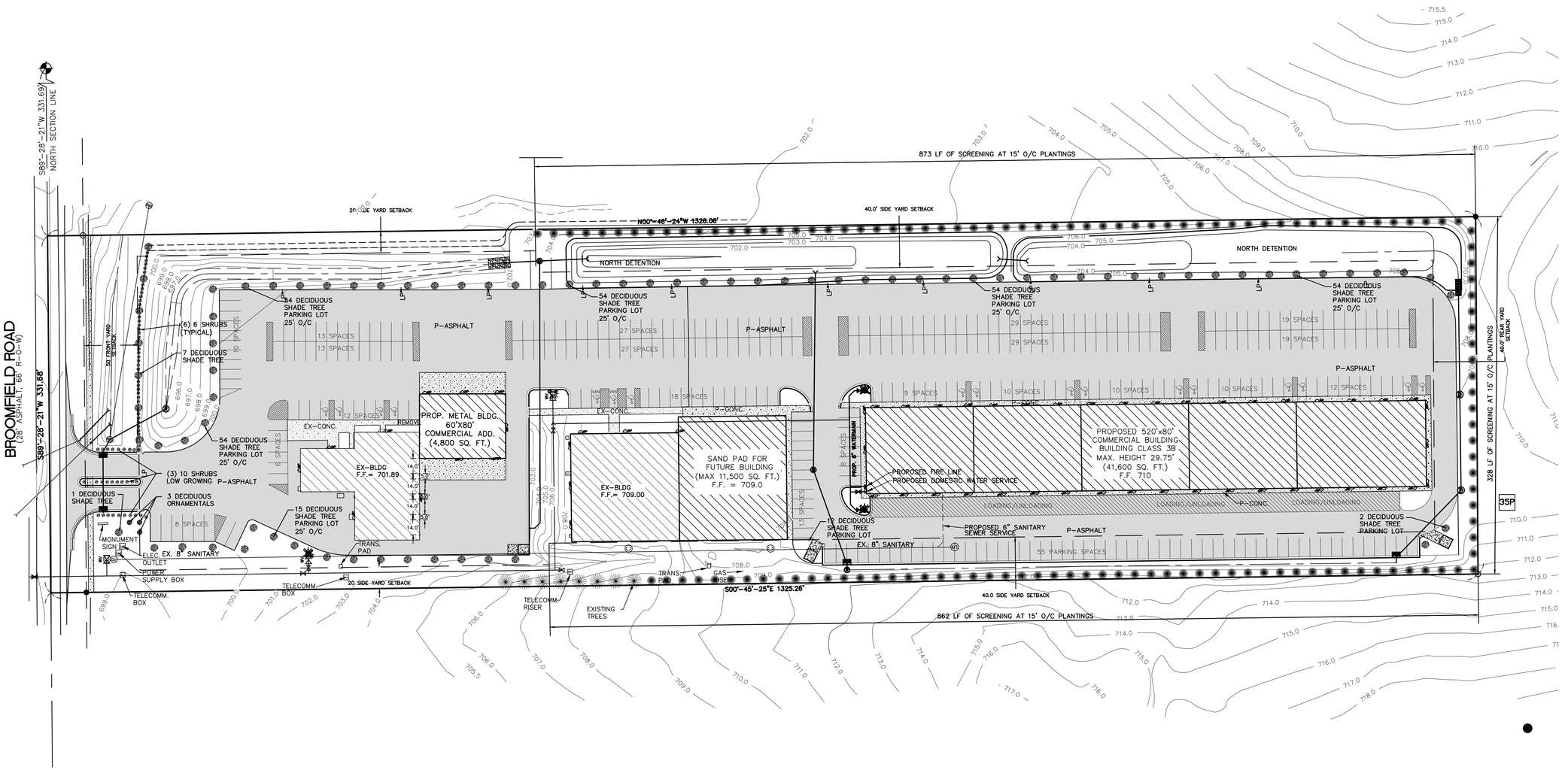
DETAILS
BROOMFIELD COMMONS CONDO ASSO.
PART OF THE NORTHWEST 1/4 SECTION 28, T.14 N.- R.04 W.
UNION TOWNSHIP, ISABELLA COUNTY MICHIGAN

REVISIONS:

SUBMITTALS:
SUBMITTAL FOR CLIENT REVIEW 1-8-21
SUBMITTAL TO TWP PLANNING 4-26-21

JOB NUMBER: 2021-001
DRAWN BY: TELB
DESIGNED BY: TELB
CHECKED BY: TELB

SCALE: N/A
SHEET NUMBER: 6 OF 9



STREET PLANTINGS – BROOMFIELD ROAD

8 DECIDUOUS TREES
3 ORNAMENTAL TREES
66 SHRUBS

SCREENING AGAINST RESIDENTIAL

EAST SIDE 15' O/C 870 LF
SOUTH SIDE 15' O/C 332 LF
WEST SIDE 15' O/C 860 LF

PARKING LOT PLANTING
TOTAL PLANTINGS = 357/5 = 71 TREES

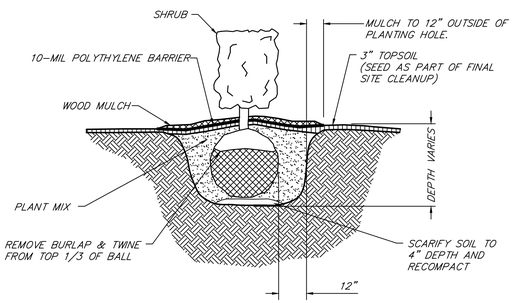
PROP DECIDUOUS TREE WITH A MIN. CALIPER OF 2.5 INCHES AND A MIN. HEIGHT OF 4 FEET TO FIRST BRANCH.

PROP ORNATMENTAL TREE – MIN. CALIPER OF 2.0 INCHES & A MIN. HEIGHT OF 4 FEET TO FIRST BRANCH.

PROP SHRUB– MIN. HEIGHT OF 3 FEET AND A MIN. SPREAD OF 2 FEET.

NOTE: ALL SOFT AREAS WILL BE SEED AND SHALL BE GRASS COVERED.

0 25 50 100
1 inch = 50 ft.

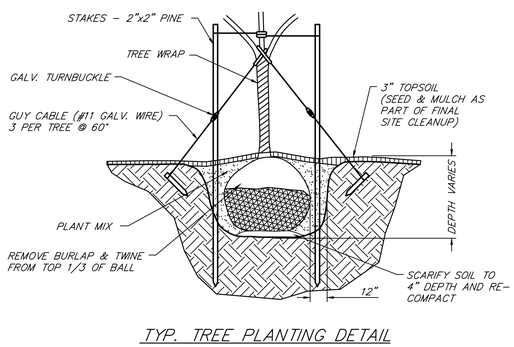


TYPICAL EVERGREEN SHRUB PLANTING DETAIL

NOT TO SCALE

TREE PLANTING GENERAL NOTES:

- STAKE TREES UNDER 4" CALIPER
- GUY TREES 4" CALIPER & OVER
- PRUNE TO THIN & SHAPE CANOPY
- CONTRACTOR TO VERIFY PERCOLATION OF PLANTING PIT PRIOR TO INSTALLATION
- SET TOP OF BALL TO CORRESPOND WITH FINISH GRADE
- SET STAKES VERTICAL AND EVENLY
- STAYS OR GUYS TO BE SET ABOVE FIRST BRANCH
- SCARIFY SOIL TO 4" DEPTH & RECOMPACT
- STAKES TO EXTEND 18" BELOW PIT IN UNDISTURBED SOIL



TYP. TREE PLANTING DETAIL

NOT TO SCALE

CMS & D
SURVEYING / ENGINEERING
2257 EAST BROOMFIELD ROAD
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-0702
EMAIL: info@cms-d.com

LANDSCAPING PLAN

BROOMFIELD COMMONS CONDO ASSO.
PART OF THE NORTHWEST 1/4
SECTION 28, T.14 N.– R.04 W.
UNION TOWNSHIP, ISABELLA COUNTY
MICHIGAN

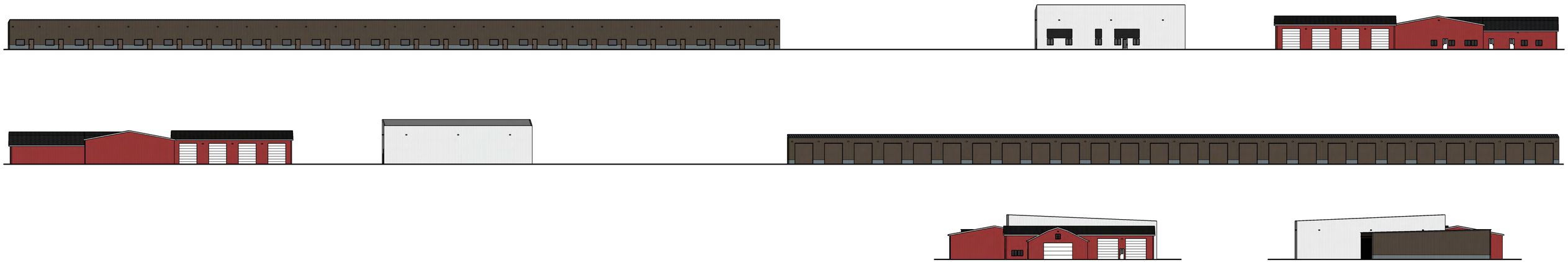
REVISIONS:

SUBMITTALS:
SUBMITTAL FOR CLIENT REVIEW 1-8-21
SUBMITTAL TO TWP PLANNING 4-26-21

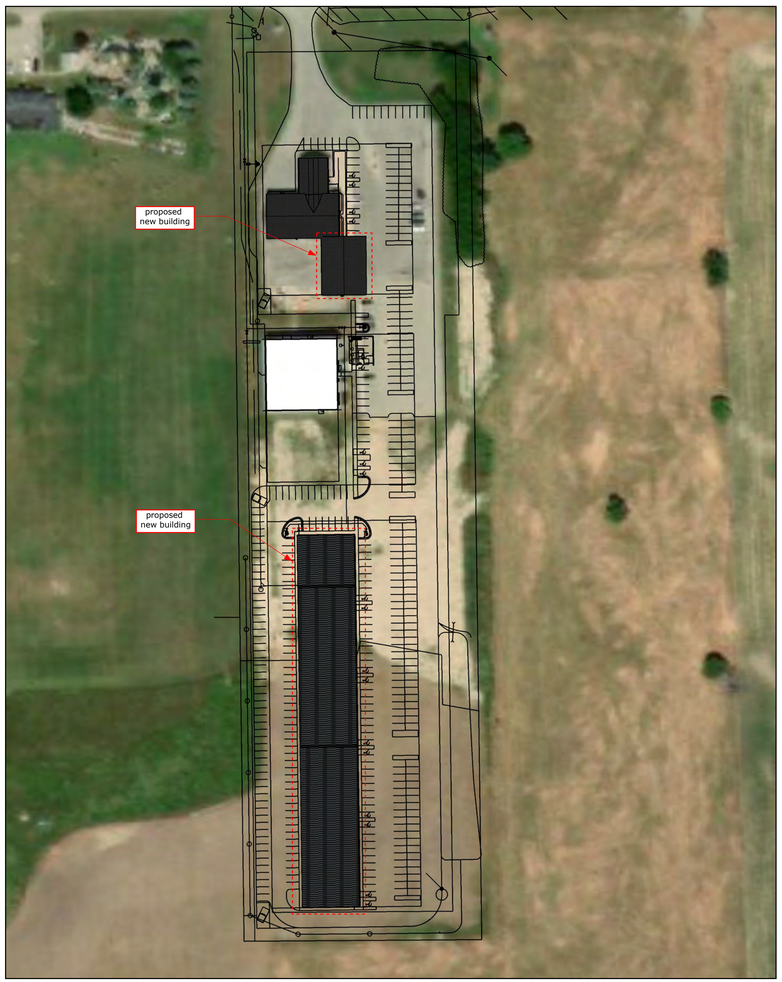
JOB NUMBER: 2021-001
DRAWN BY: TELB
DESIGNED BY: TELB
CHECKED BY: TELB

SCALE 1" = 50'

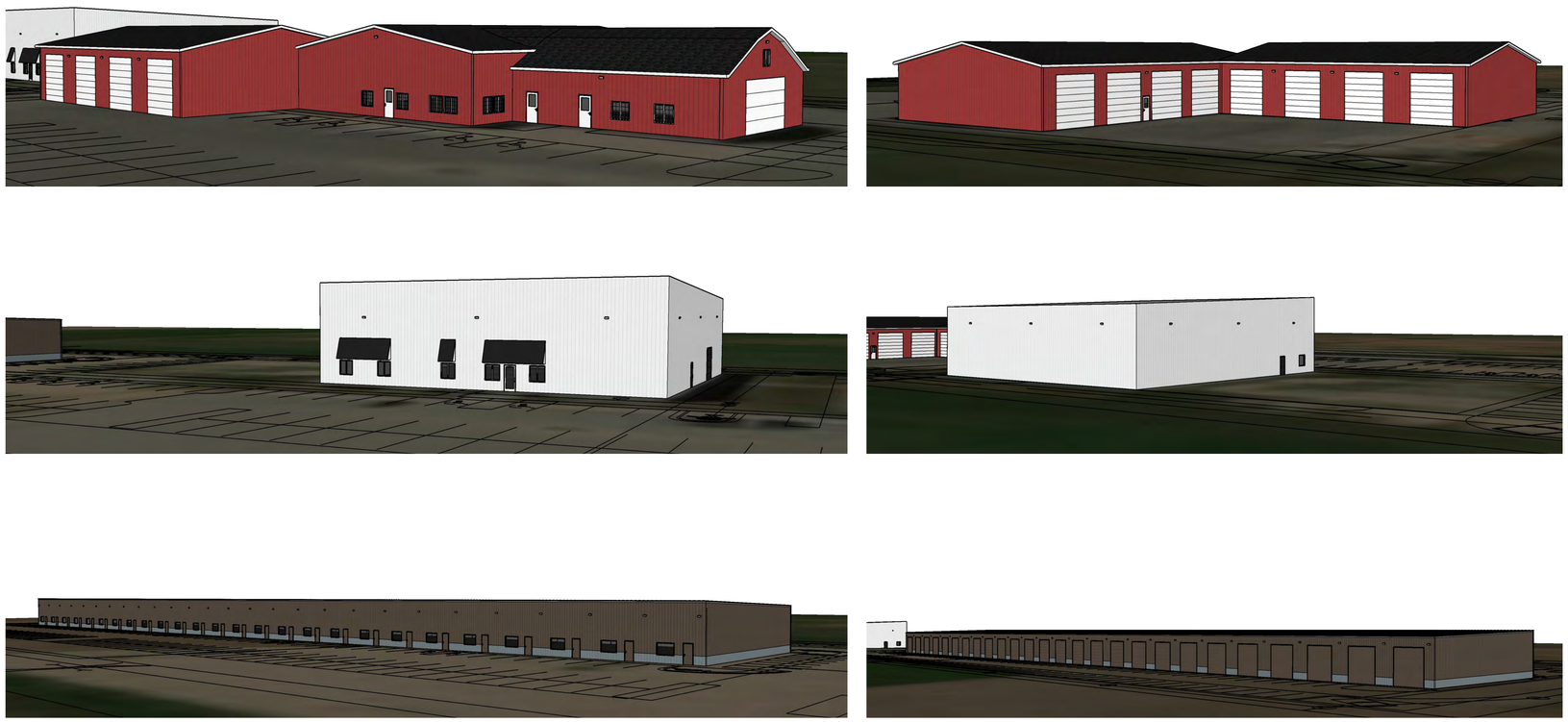
SHEET NUMBER 7 OF 9



SCHEMATIC ELEVATIONS
SCALE: 1" = 30'-0"

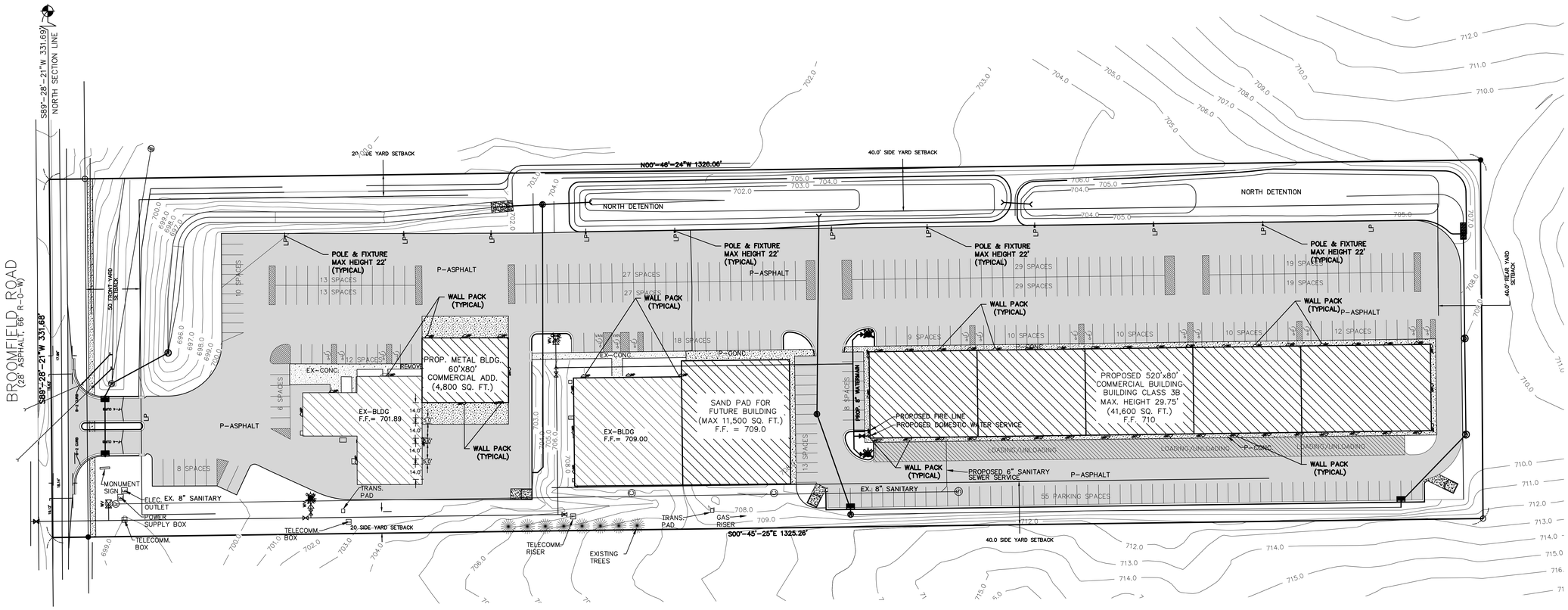


SCHEMATIC SITE PLAN
SCALE: 1" = 100'-0"



SCHEMATIC 3D VIEWS

McGuirk SAND - GRAVEL	**PROOF** 3046 Jen's Way - Mount Pleasant, MI 48858 989-772-1309 Drawings and documents are schematic and are not suitable for construction.	McGuirk Sand - Gravel Broomfield Commons	page number 1 April 26, 2021 140



0 25 50 100

1 inch = 50 ft.

RuggedGrade

TECHNICAL DATA SHEET

c UL us LISTED

DLC QPL LISTED





NAME: LED Wall Pack Light

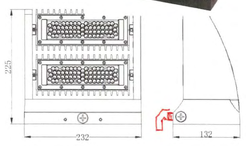
P/N : RG-RWP02-120WAT1NA1

Advantage:

- UL cUL DLC certificate
- IP65 Internal driver
  Input voltage 100-277VAC
- No UV or IR in the beam
- Easy to install and operate
- Energy saving, long lifespan
- Instant start, NO humming
- Green and eco-friendly without mercury

Application:

- entrance lighting，courtyard lighting
- Industrial lighting，Outdoor landscape lighting
- Building lighting, hotel lighting
- Wall lighting area and so on



Atlas Eagle Series

2nd Generation LED Site Lighter

c UL us LISTED · DLC PREMIUM · MADE IN THE USA

Project Information	
Job Name	
Fixture Type	Eagle Series
Catalog Number	SLPS
Approved by	



BUY AMERICAN COMPLIANT*

SPECIFICATIONS:

Construction:
Designed for commercial and industrial applications, providing cooler operating temperatures, brighter light and longer LED life. The die cast aluminum housing utilizes external airflow fins allow for greater heat dissipation. The easy access driver compartment is a thermally independent compartment, separate from LED generated heat, for cooler operation and longer driver life.

Optics:
Atlas Site Lighter Pro fixtures utilize precision engineered individual lenses for maximum light intensity. The lens is made of optical grade polycarbonate. Advanced one piece optic board engineered for maximum light intensity. Types II, V and Forward Throw distributions are available. Type II and Forward Throw optics are rotatable allowing for optimal placement of the fixtures on the perimeter of any layout.

Mounting:
The easy mount bracket makes installation to any style pole quick and easy. Tenon and other mounting accessories also available.
For round poles **500-SLPMRPA** is required.

Thermal Management:
Atlas Site Lighter Pro fixtures are designed as a complete system to optimize LED life and light output. The thermal stacking heat removal technology extracts heat from within the housing moving it away from LEDs and components. The lower temperatures result in long LED life (200,000+ hrs†) and component life and also allows for higher light output.

Listings:
Luminaire is certified to UL/cUL Standards for Wet Locations
†The following qualify for DesignLights Consortium Premium: SLPS6L (All colors/options), all other luminaires are DesignLights Consortium qualified. All are eligible for rebates from DLC member utilities.

AC Input:
120/208/240/277/347/480 V

Driver:
Constant current, 120-277 VAC, 50-60 Hz
High Efficiency – min. 88%
Off-State Power: 0 Watts
0-10 V Dimming

LEDs:
Available in 4000K, 4500K and 5000K, CCT
Epoxy Guard™ protective conformal coated boards

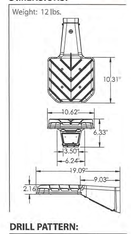
Reduced Glare:
Positioning of the LED modules within the housing result in light directed to desired locations and reduces offensive light.

Testing:
Atlas LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 & LM-80.

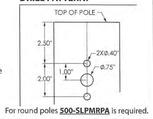
Warranty: Five-year limited warranty

DIMENSIONS:

Weight: 12 lbs.



DRILL PATTERN:



For round poles **500-SLPMRPA** is required.

Rebates and Incentives are available in many areas.
Contact an Atlas Representative for more information.

†LED Life Span Based Upon LM-80 Test Results

ATLAS LIGHTING PRODUCTS, INC.
PO BOX 2348 | BURLINGTON, NC 27216
800-849-8485 | FAX: 1-855-847-2794 | www.atlasled.com

*The majority of Atlas Lighting Products are assembled in USA facilities by an American Workforce utilizing both Domestic and Foreign components. Meets Buy American requirements within the ARRA.

Atlas Eagle Series

2nd Generation LED Site Lighter

ORDERING INFORMATION

SLPS | 9L | T2 | 4K | | | | |

- PRODUCT SERIES: SLPS = 2nd Generation Site Lighter Pro
- LUMEN PACKAGE: 6L = 6,000 Lumens; 9L = 9,000 Lumens; 12L = 12,000 Lumens
- DISTRIBUTION: T2 = Type 2; T5 = Type 5; FT = Forward Throw; T2L = Type 2 Rotated Left; FTL = Forward Throw Rotated Left; T2R = Type 2 Rotated Right; FTR = Forward Throw Rotated Right
- COLOR TEMP.: 4K = 4000K; 45K = 4500K; 5K = 5000K
- VOLTAGE: Blank = 120-277; 4 = 347/480
- DIMMING: Blank = 0-10vdc
- COLOR RENDERING: Blank = 70CRI
- FIXTURE COLOR: Blank = Bronze; BK = Black; SL = Silver; WT = White
- OPTIONS: PR = 7 Pin Photocell Receptacle; SP = Surge Protection; IC = Integrated Motion Control; BTM = Bluetooth Microwave Motion Control (INCLUDES PHOTOCONTROL)

PERFORMANCE DATA

Lumen Package	Distribution	CRI	4000K CCT			4500K CCT			5000K CCT		
			Delivered Lumens	Efficacy (LPW)	Wattage	Delivered Lumens	Efficacy (LPW)	Wattage	Delivered Lumens	Efficacy (LPW)	Wattage
6L	T2	70	6297	154	41.0	6288	153	41.0	6288	153	41.0
	FT	70	6005	146	40.6	5839	144	40.6	5839	144	40.6
	T5	70	6025	147	40.6	6016	147	40.9	6016	147	40.9
9L	T2	70	9041	144.4	62.6	8859	141.5	62.6	8859	141.5	62.6
	FT	70	8717	139.2	62.8	8541	136.0	62.8	8541	136.0	62.8
	T5	70	8639	137.9	62.5	8465	134.8	62.8	8465	134.8	62.8
12L	T2	70	12028	135.9	88.6	11822	133.4	88.6	11822	133.4	88.6
	FT	70	11417	128.9	88.6	11222	126.7	88.6	11222	126.7	88.6
	T5	70	11578	130.5	88.7	11380	128.9	88.3	11380	128.9	88.3

DLC PRODUCT INFORMATION:

Lumen Package	Distribution	4000K CCT		4500K CCT		5000K CCT	
		DLC Product ID	Classification	DLC Product ID	Classification	DLC Product ID	Classification
6L	T2	PQWQQ99O	Premium	PXAHRNV6	Premium	P1GRUCD	Premium
	FT	PAY0VYAV	Premium	PXR4SIUD	Premium	P5QCENSF	Premium
	WT5	PDDMQOVI	Premium	P83YWNY8	Premium	PD4VM47O	Premium
9L	T2	PUV7WJ61	Standard	PK37XOG7	Standard	PNFUPK5T	Standard
	FT	PL8M06NS	Standard	PO7XUT4A	Standard	PXVK7P7T	Standard
	T5	PD40BRWG	Standard	PUKJHXL9	Standard	PO2FNJVI	Standard
12L	T2	PUJMYPHD	Standard	PWXHL19	Standard	PXWNH38J	Standard
	FT	PBHJ66QB	Standard	P1Z84DCL	Standard	PISNTZ6O	Standard
	T5	PZD6IXBV	Standard	PPBWIPC2	Standard	P569WB74	Standard

ATLAS LIGHTING PRODUCTS, INC.
PO BOX 2348 | BURLINGTON, NC 27216
800-849-8485 | FAX: 1-855-847-2794 | www.atlasled.com

The majority of Atlas Lighting Products are assembled in USA facilities by an American Workforce utilizing both Domestic and Foreign components. Meets Buy American requirements within the ARRA.

NOTE:
THE LIGHTING LAYOUT WAS PREPARED BY MID-STATE ELECTRIC OF MT. PLEASANT MICHIGAN. MASTER ELECTRICIAN AARON LISCOMB. THE LAYOUT HAS BEEN SENT TO THE LIGHTING MANUFACTURER FOR FINAL PHOTOMETRICS. THE PHOTOMETRICS WILL BE ADDED TO THE LAYOUT ONCE RECEIVED.

CMS & D
SURVEYING / ENGINEERING
2257 EAST BROOMFIELD ROAD
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

LIGHTING LAYOUT PLAN
BROOMFIELD COMMONS CONDO ASSO.

PART OF THE NORTHWEST 1/4
SECTION 28, T.14 N.– R.04 W.
UNION TOWNSHIP, ISABELLA COUNTY
MICHIGAN

REVISIONS:

SUBMITTALS:
SUBMITTAL FOR CLIENT REVIEW 1-8-21
SUBMITTAL TO TWP PLANNING 4-26-21

JOB NUMBER: 2021-001
DRAWN BY: TELB
DESIGNED BY: TELB
CHECKED BY: TELB

SCALE 1" = 50'

SHEET NUMBER 9 OF 9

ISABELLA COUNTY DRAIN COMMISSIONER
Robert Willoughby
200 North Main, Mt. Pleasant, MI 48858
Phone (989) 317-4072
Fax (989) 779-8785
rwilloughby@isabellacounty.org

April 28, 2021

Peter Galliant
Charter Township of Union
2010 South Lincoln Road
Mt. Pleasant, Michigan 48858

Re: Proposed Construction for Broomfield Commons Condominium Association Within the Recker Drain Right-of-way, 2420 Broomfield Road, Union Charter Township.

Mr. Galliant:

I have reviewed the proposed construction plans for the Broomfield Commons Condominium Association. There are a number of items being proposed within the Drain Right-of-way. The Recker Drain is a tile drain with an overland flow channel. Neither may be disturbed without the Drain Commissioner's Approval. I have discussed the project with the design engineer and our consulting engineer and have the following comments that need to be addressed in the plan set.

1) The proposed sidewalk along Broomfield Road. Although I understand the need for sidewalks, the proposed location is outside of the road right-of-way and within the drain right-of-way. This area currently is part of the overland flow channel for the Recker Drain. If the sidewalk must be located within the drain right-of-way, then the overland flow pattern must be reshaped and rerouted. The plan set shows the two cross-culverts being extended and the overland flow pattern reshaped. The Drain Commission will require this work to be inspected and approved by our office.

2) The proposed enlarged entrance lies within the drain right-of-way. Based on my review of the plans, it appears that one of our drainage structures will need to be adjusted and cored into for the detention basins outlet. The Drain Commission will require this work to be inspected and approved by our office.

3) The proposed tree planting within the drain right-of-way. We would prefer that no trees are planted within our right-of-way. If trees must be planted, they must be a minimum of 10 feet away from our tile drain and may not be placed within the overland flow pattern. The current plan set has tree planting too close to the tile drain. The plan set should be revised to allow for the 10 foot clearance.

4) A portion of the proposed detention area lies within the drain right-of-way. Typically, this is not allowed. In this particular situation, it appears that this will not negatively impact the drain and/or the overflow pattern and thus it will be allowed.

Any item that is constructed within the Isabella County Drain Commission's Right-of-Way is placed at their own risk. Should the Recker County Drain need to be worked on, the Drain Commission will not be responsible for any damage and will not be required to replace any item whether public or private.

If you have any questions or need further information, please feel free to contact me at my office.

Sincerely,

Robert Willoughby
Isabella County Drain Commissioner

RW, ICDC/taw

cc: Tim Bebee, CMS&D

Sam Ber Engineering

Bruce E. Rohrer, P.E.
1216 E Gaylord St.
Mt. Pleasant, Michigan 48858
(989) 330-2150

April 28, 2021

Peter Galliant
Charter Township of Union
2010 South Lincoln Road
Mt. Pleasant, Michigan 48858

Re: Storm Water Management Plan for Broomfield Commons Condominium Association, 2420 Broomfield Road, Union Charter Township.

Mr. Galliant:

I have reviewed the Storm Water Management Plan drawings and calculations, dated April 26, 2021, prepared by Tim Bebee of CMS&D Surveying and Engineering for the above captioned project, located in the Northwest ¼ of Section 28 of Union Township, being Units A, B and C of Broomfield Commons Condominium. The proposed plan is consistent with the Union Township Storm Water Ordinance.

I have discussed the proposed project with the Isabella County Drain Commissioner, as it relates to the proposed construction of the new sidewalk, entrance drive, detention area and plantings within the County Drain Commission's Right-of-Way for the Recker Drain. The Drain Commissioner's office will be writing their own review letter addressing these proposed items in their right-of-way.

If you have any questions or need further information, please feel free to contact me at my office.

Sincerely,

Bruce E Rohrer

Bruce E, Rohrer, P.E.
Consulting Engineer
Isabella County

BER/taw

cc: Tim Bebee, CMS&D

MT. PLEASANT FIRE DEPARTMENT

INSPECTION REPORT

2420 E BROOMFIELD RD, MT. PLEASANT MI 48858

DETAILS

Inspection Date: 04/13/2021 | Inspection Type: PLAN REVIEW UNION TOWNSHIP - Site | Inspection Number: 2023 | Shift: Lieutenant | Station: Mt. Pleasant Fire Department | Unit: N/A | Lead Inspector: BRADLEY DOEPKER | Other Inspectors: RANDY KEELER

STATUS	CODE	DESCRIPTION
FAIL	1 PROPERTY - Identification	No Code Description Inspector: BRADLEY DOEPKER - Comments: Proposed additions to 2 buildings. With a total of 7 separate additional buildings on the site.
FAIL	10.1 - Apparatus Access	No Code Description Inspector: BRADLEY DOEPKER - Comments: Apparatus access as submitted is approved for proposed building heights.
FAIL	503.1.1 - Buildings and facilities.	Approved fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and shall extend to within 150 feet (45 720 mm) of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility. Exception: The fire code official is authorized toincrease the dimension of 150 feet (45 720 mm) where: 1. The building is equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3. 2. Fire apparatus access roads cannot be installed because of location on property, topography, waterways, nonnegotiable grades or other similar conditions, and an approved alternative means of fire protection is provided. 3. There are not more than two Group R-3 or Group U occupancies. Inspector: BRADLEY DOEPKER - Comments: Site plan meets above requirements.
FAIL	503.2.3 - Surface.	Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be surfaced so as to provide all- weather driving capabilities. Inspector: BRADLEY DOEPKER - Comments:
FAIL	503.2.5 - Dead ends.	Dead-end fire apparatus access roads in excess of 150 feet (45 720 mm) in length shall be provided with an approved area for turning around fire apparatus. Inspector: BRADLEY DOEPKER - Comments: Site plan meets above requirements.

STATUS	CODE	DESCRIPTION
FAIL	503.3 - Marking.	Where required by the fire code official, approved signs or other approved notices or markings that include the words NO PARKING—FIRE LANE shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. The means by which fire lanes are designated shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility. Inspector: BRADLEY DOEPKER - Comments: Front proposed addition appears to have an apron or approach that could be used for parking. This area would need to be mark as NO PARKING-FIRE LANE on the East side.
FAIL	ACCESS AND WATER - Road and Water Supply	When fire apparatus access roads or water supply for fire protection is required to be installed, such protection shall be installed and made serviceable prior to and during the time of construction except when approved alternative methods of protection are provided. Temporary street signs shall be installed at each street intersection when construction of new roadways allows passage by vehicles in accordance with Section 505.2 of the 2012 Edition of the International Fire Code. Inspector: BRADLEY DOEPKER - Comments:
FAIL	ACCESS ROAD LOAD - Designed and Maintained to Support the Load	All fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be surfaced so as to provide all- weather driving capabilities in accordance with Chapter 5, Sections 503.2.3 and 503.4 of the 2012 Edition of the International Fire Code. Inspector: BRADLEY DOEPKER - Comments:
FAIL	ACCESS ROAD W/HYDRANT - Width of Road with a Fire Hydrant	Where a fire hydrant is located on a fire department apparatus access road, the minimum road width shall be 26 feet, exclusive of shoulders as in accordance with Appendix D, Section D103.1 of the 2012 Edition of the International Fire Code. Inspector: BRADLEY DOEPKER - Comments: Site plan meets above requirements.
FAIL	BUILDING IDENTIFICATION - Buildings Shall Have Address Numbers	Provide address identification numbers in accordance with Chapter 5, Sections 505.1 of the 2012 Edition of the International Fire Code or applicable to the City of Mt. Pleasant code of ordinances 150.01 Land Usage. Inspector: BRADLEY DOEPKER - Comments: Will verify on final inspection
FAIL	FDC HORN STROBE - Horn Strobe Above FDC	Provide a horn strobe above the Fire Department Connection. Fire Prevention Ordinance 93.12(A) Inspector: BRADLEY DOEPKER - Comments: Horn Strobe will need to be provided above the FDC.

STATUS	CODE	DESCRIPTION
FAIL	FDC LOCATION - FDC Location and Distance	Fire Department connections shall be located on the street side of buildings, fully visible and recognizable from the street or nearest point of fire department vehicle access or as other wise approved by the fire chief. The fire department connection shall be located within 150 feet of a fire hydrant , in accordance with Chapter 9, Section 912.2.1 of the 2012 Edition of the International Fire Code and the Fire Prevention Ordinance 93.12 Provide a 5" Storz Fire Department Connection with a 30 degree downturn. Inspector: BRADLEY DOEPKER - Comments: FDC location and type will be approved by the Fire Department
FAIL	FDC MAINTENANCE - FDC Maintained and Unobstructed	Immediate access to fire department connections shall be maintained at all times and without obstruction by fences, bushes, trees, walls or any other fixed or moveable object. Access to fire department connections shall be approved by the fire chief as in accordance with Chapter 9, Section 912.3 of the 2012 Edition of the International Fire Code. Inspector: BRADLEY DOEPKER - Comments:
FAIL	GENERAL STATEMENT - List Not All-Inclusive	This list shall not be considered all-inclusive, as other requirements may be necessary, additional requirements are located in Chapter 5 and appendixes B, C, and D of the 2012 Edition of the International Fire Code. Inspector: BRADLEY DOEPKER - Comments: This approval is based off of the submitted site plan only and all other additions or deletions will need to be re-submitted. The approval is based on required sprinkler buildings as outlined in the Michigan Building Code.
FAIL	HYDRANT DISTANCE - Hydrant maximum distance from buildings	Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 400 feet (122 m) from a hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the fire code official. Exceptions: 1. For Group R-3 and Group U occupancies, the distance requirement shall be 600 feet (183 m). 2. For buildings equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, the distance requirement shall be 600 feet (183 m). Inspector: BRADLEY DOEPKER - Comments: Fire Hydrants are approved for a fully sprinkled building only. Any changes to the effect could cause changes to hydrant locations.

STATUS	CODE	DESCRIPTION
FAIL	HYDRANT PROTECTION - Hydrant minimum distance from Buildings	NFPA 24 7.2.3 Hydrants shall be located not less than 40 ft (12m) from the buildings to be protected. Hydrants in parking areas or in any area in which they are exposed to potential damage should be protected by bollards on all sides. The bollards should not be closer than 4 ft (1.2m) to the protected hydrant. When located near a roadway, the hydrant should be placed within 6 ft (1.8m) of the pavement, unless the AHJ determines another location is more acceptable. Inspector: BRADLEY DOEPKER - Comments: Site plan meets above requirements.
FAIL	KNOX BOX - Knox Box Requirements and Location	Provide a Knox Key entry device and install it in approved location by the Fire Code Official, as in accordance with Chapter 5, Section 506.1, 506.1.1 and 506.2 of the 2012 Edition of the International Fire Code. (Go to Knoxbox.com and search by fire department or zip code - select "Mt. Pleasant Fire Department" and place order for the type of Knox box desired.) Inspector: BRADLEY DOEPKER - Comments: A Knox Box will need to be installed. Please order with the above information and contact the Fire Marshal prior to mounting.
FAIL	TWO ACCESS ROADS - Commercial Property	Secondary access required to commercial property in accordance with Chapter 5, Section 503, 503.1.2 and Appendix D, Section D104 of the 2012 Edition of the International Fire Code. Inspector: BRADLEY DOEPKER - Comments: Site plan meets above requirements.
FAIL	WATER SUPPLY (DEAD END) - 8in Dead End Capable of Required Fire Flow	Provide an approved water supply capable of supplying the required fire flow for fire protection in accordance with Chapter 5, Section 507.1 of the 2012 Edition of the International Fire Code. (Provide the department with data to verify that the proposed dead end water supplies will provide the required fire flow for the proposed fire hydrants and the proposed building fire suppression system.) Inspector: BRADLEY DOEPKER - Comments:
FAIL	WATER SUPPLY (SPACING) - Number and Spacing of Hydrants	Provide fire hydrant locations in accordance with Chapter 5, Section 507.5.1 of the 2012 Edition of the International Fire Code. The number and spacing of fire hydrants is based on the construction type and square footage of the building in accordance with Appendix B and C and tables B105.1 and C105.1 of the 2012 Edition of the International Fire Code. Inspector: BRADLEY DOEPKER - Comments: The number and spacing of hydrants is approved based on the submitted building size and all buildings being fully sprinkled. A 50% reduction of hydrants was allowed due to sprinkled buildings.

GENERAL NOTES	
BRADLEY DOEPKER - 04/13/2021 @ 15:03	Based on the review of the submitted site plan, recommend approval.

NEXT INSPECTION DATE

No Inspection Scheduled

CONTACT SIGNATURE

CMS &D

Contact Refused
Refusal Reason: NA

INSPECTOR SIGNATURE

BRADLEY DOEPKER
Signed on: 04/13/2021 @ 15:03



QUESTIONS ABOUT YOUR INSPECTION?

BRADLEY DOEPKER
bdoepker@mt-pleasant.org
(989) 779-5150

From: Rick Collins
To: info@cms-d.com
Cc: Peter Gallinat
Subject: RE: McGuirk"s Broomfield Road Development
Date: Thursday, April 22, 2021 1:12:32 PM
Attachments: image001.jpg

I have no issues with the attached plan.

From: info@cms-d.com <info@cms-d.com>
Sent: Thursday, April 22, 2021 11:30 AM
To: Rick Collins <rcollins@ictcbus.com>
Subject: McGuirk's Broomfield Road Development

Rick,

Please review for the Union Township Site Plan Review.

Let us know if you have any comments or questions.

Thank you



Draft Motions: PSPR 21-10 McGuirk – Broomfield Commons Condo Commercial Development Phase Combined Preliminary - Final Site Plan Review Application

MOTION TO APPROVE THE COMBINED PRELIMINARY – FINAL SITE PLAN AS PRESENTED:

Motion by _____, supported by _____, to approve the PSPR 21-10 combined preliminary and final site plan for the next phase of the Broomfield Commons Condominium commercial development on parcel number 14-048-00-006-00, located on approximately 10.1 acres on the south side of E. Broomfield Rd. 2,000 feet east of S. Lincoln Rd. in the northwest quarter of Section 28 and in the and in the B-4 (General Business) zoning district, finding that the April 26, 2021 site plan fully complies with the applicable Zoning Ordinance requirements for preliminary and final site plan approval, including Sections 14.2.P. (Required Site Plan Information) and 14.2.S. (Standards for Site Plan Approval).

MOTION TO APPROVE THE COMBINED PRELIMINARY – FINAL SITE PLAN WITH CONDITIONS:

Motion by _____, supported by _____, to approve the PSPR 21-10 combined preliminary and final site plan for the next phase of the Broomfield Commons Condominium commercial development on parcel number 14-048-00-006-00, located on approximately 10.1 acres on the south side of E. Broomfield Rd. 2,000 feet east of S. Lincoln Rd. in the northwest quarter of Section 28 and in the and in the B-4 (General Business) zoning district, finding that the April 26, 2021 site plan can comply with applicable Zoning Ordinance requirements for preliminary and final site plan approval, including Sections 14.2.P. (Required Site Plan Information) and 14.2.S. (Standards for Site Plan Approval), subject to the following condition(s):

1. Township Public Services Department approval, prior to issuance of building permits for this project.
2. Provide a copy of the as-recorded easement for the new public sidewalk outside of the road right-of-way to the Zoning Administrator prior to issuance of building permits for this project.
3. Add the missing items of required information per Section 14.2.P. to a revised site plan.
4. Correct and update the trash dumpster details, parking and loading space details, and landscaping details on a revised site plan to conform to Zoning Ordinance requirements.
5. Provide the required photometric plan and exterior lighting details and specifications to verify compliance with Section 8.2 as part of a revised final site plan set.
6. Submittal of a revised final site plan for administrative review and acceptance by the Zoning Administrator, prior to issuance of a building permit.

_____

MOTION TO POSTPONE ACTION:

Motion by _____, supported by _____, to postpone action on the PSPR 21-10 combined preliminary and final site plan for the next phase of the Broomfield Commons Condominium commercial development on parcel number 14-048-00-006-00 until _____ _____, 2021 for the following reasons: _____

_____

Draft Motions: PSPR 21-10 McGuirk – Broomfield Commons Condo Commercial Development Phase Combined Preliminary - Final Site Plan Review Application

MOTION TO APPROVE ONLY THE PRELIMINARY SITE PLAN WITH CONDITIONS:

Motion by _____, supported by _____, to approve only the PSPR 21-10 preliminary site plan for the next phase of the Broomfield Commons Condominium commercial development on parcel number 14-048-00-006-00, located on approximately 10.1 acres on the south side of E. Broomfield Rd. 2,000 feet east of S. Lincoln Rd. in the northwest quarter of Section 28 and in the and in the B-4 (General Business) zoning district, finding that the April 26, 2021 site plan can comply with applicable Zoning Ordinance requirements for preliminary site plan approval, including Sections 14.2.P. (Required Site Plan Information) and 14.2.S. (Standards for Site Plan Approval), subject to the following condition(s):

1. Add the missing items of required information; correct and update the trash dumpster, parking and loading space, and landscaping details; and provide the required exterior lighting details on a revised final site plan to conform to Zoning Ordinance requirements.
2. Township Public Services Department approval of the revised final site plan.
3. Submittal of an updated final site plan for Planning Commission review and approval.
4. Provide a copy of the as-recorded easement for the new public sidewalk outside of the road right-of-way to the Zoning Administrator prior to issuance of building permits for this project.

_____

_____

_____

_____

_____

MOTION TO DENY:

Motion by _____, supported by _____, to deny the PSPR 21-10 combined preliminary and final site plan for the next phase of the Broomfield Commons Condominium commercial development on parcel number 14-048-00-006-00, located on approximately 10.1 acres on the south side of E. Broomfield Rd. 2,000 feet east of S. Lincoln Rd. in the northwest quarter of Section 28 and in the and in the B-4 (General Business) zoning district, finding that the April 26, 2021 site plan does not comply with applicable Zoning Ordinance requirements, including Sections 14.2.P. (Required Site Plan Information) and 14.2.S. (Standards for Site Plan Approval), for the following reasons:

_____

_____

_____

_____

_____

Community and Economic Development Department
2010 S. Lincoln Rd.
Mt. Pleasant, MI 48858
989-772-4600 ext. 232

COMBINED PRELIMINARY - FINAL SITE PLAN REPORT

TO:	Planning Commission	**DATE:**	May 10, 2021
FROM:	Rodney C. Nanney, AICP Community and Economic Development Director	**ZONING:**	I-2 General Industrial effective 5/9/2021

PROJECT: PSPR21-11 – Combined Preliminary and Final Site Plan Approval Application for improvements to an existing industrial building and site to accommodate a new package distribution facility at 2266 Northway Drive.

PARCEL(S): PID 14-152-00-005-02

OWNER(S): Avenue A Properties, LLC (Ryan Smith, Member Rep)

LOCATION: 1.92 acres on the west side of Northway Drive in the NE 1/4 of Section 13.

EXISTING USE: Mercy Sales Inc. Federal Fluid **ADJACENT ZONING:** B-7, I-2

ACTION REQUESTED: To review and take action to approve, deny or approve with conditions the PSPR21-11 combined preliminary and final site plan dated April 26, 2021 for improvements to an existing industrial building and site to accommodate a new package distribution facility at 2266 Northway Drive.

Background Information

The project is to renovate the interior of an existing tenant suite at 2266 Northway Drive into a warehouse/distribution facility with accessory support office space. Goods are to be delivered, sorted, and distributed on the same day. Proposed improvements include a widened entrance drive to improve two-way traffic flow, box truck maneuverability, and overall safety, parking lot improvements to support the anticipated number of employees, new exterior lighting on the building, and a new exterior entrance canopy and new internal sidewalks for pedestrian access.

The project has been submitted for review as a combined preliminary and final site plan, which is an option under Section 14.2.M. of the Zoning Ordinance. The Planning Commission may take action on the combined site plan, or may choose to grant only preliminary site plan approval upon determining that the site plan does not fully satisfy the final site plan approval standards or would require substantial revision to satisfy these standards.

Nonconforming Site

The project's location is an existing industrial building originally developed well before the current Zoning Ordinance's site development standards were established. As such, it is considered to be a "nonconforming site" subject to the provisions of Section 12.5 (Nonconforming Sites). This Section encourages improvements to existing nonconforming sites in the Township without a complete upgrade of all site elements by first prioritizing

improvements to correct public safety deficiencies, and second by establishing a menu of ten (10) other categories of potential improvements and requiring a minimum of three (3) of these improvements to be addressed on the site plan. Finally, the Section includes a statement that a nonconforming site shall not be improved or modified in a manner that increases its nonconformity. The following findings and determinations were identified by staff following a review of the 4/26/2021 site plan for consistency with the provisions of Section 12.5:

1. The existing building and front parking area were lawfully constructed, but encroach into the minimum 75.0-foot wide front setback that currently applies from the adjacent east lot boundary.
2. The proposed site improvements include barrier-free parking and access improvements, which are the only public safety deficiencies noted on the existing site.
3. The site plan includes improvements in the following five(5) categories, which satisfies the requirement of Section 12.5.C.: Pedestrian access; vehicular access and circulation; off-street parking or loading; landscaping, and exterior lighting.
4. The scope of proposed site and building improvements is fully consistent with the provisions of Section 12.5.

Review Comments

The following review comments are based on the applicable Ordinance requirements, the required information for a preliminary site plan (see Section 14.2.P.), and the standards for preliminary site plan approval found in Section 14.2.S. of the new Zoning Ordinance.

1. **Section 14.2.P. - Site Plan Information Requirements.** The site plan conforms to the minimum information requirements for a final site plan.

Missing Site Plan Information	
Add the seal of an architect, engineer, landscape architect or land surveyor registered in the State of Michigan to the site plan.	❑
Add the tax parcel identification number and the gross and net land area to the site plan.	❑
Add the legal description of the subject parcel to the site plan.	❑
Expand the Project Description note on the cover sheet G-001 into a detailed use statement describing the proposed use, including the number of anticipated employees.	❑
Add the existing zoning classification(s) for the subject parcel and surrounding parcels (including across road rights-of-way) to the site plan.	❑
Add the owners' names, existing uses, and location of structures, drives, and improvements on surrounding parcels (including across rights-of-way) to the site plan.	❑
Add the required delineation of yard setback areas to the site plan.	❑
Add the location, type, area, height, and lighting specifications of proposed signs.	❑
Add the location, area, and dimensions of any outdoor storage areas for the proposed distribution center land use, or add a note to the site plan to confirm no outside storage.	❑
Add exterior building façade elevation drawings for the proposed canopy addition and truck dock changes, drawn to an appropriate scale.	❑

2. **Missing Site Plan Sheets.** The applicant has also submitted detailed construction plans to the Building Official for review of proposed building renovations and improvements. These plans included the following sheets with required information that should have been included as part of this site plan set. Staff has included comments on some information noted on these sheets, but the documentation will be required to be provided as part of a revised site plan set:

   - ❑ Sheet G-200 (Site Flow Design)
   - ❑ Sheet G-302 (Dock…)
   - ❑ Sheet A-101 (Construction Plan Level 01)
   - ❑ Sheet E-201 (Electrical Lighting Plan)
   - ❑ Sheet E-301 (Electrical Lighting Fixture Schedule)

3. **Section 7.10 - Sidewalks and Pathways.** The plan includes improvements to the interior sidewalks, including a new six (6) foot wide sidewalk from the parking areas to the building entrances. The public sidewalk required by the Township's Sidewalk and Pathway Ordinance No. 2009-03 along the Northway Dr. frontage within the road-right-of-way or a separate sidewalk easement is missing from the site plan. The applicant has also not included any request for temporary relief from sidewalk construction on the site plan consistent with the Township's established policy. At a minimum, the following detail will need to be addressed by the applicant on a revised site plan:

   - ❑ Add a formal written request for temporary relief from public sidewalk construction to the site plan consistent with the Township's established policy for timing of sidewalk installations, indicating the fact that the development is located on a property zoned industrial as the reason for the temporary relief.

4. **Section 8.2. - Exterior Lighting.** The site plan as presented includes a photometric plan (sheet E-202), but is missing required fixture details needed to confirm compliance with Section 8.2 (Exterior Lighting) standards. At 20.3 footcandles near the new canopy entrance, the photometric plan's anticipated illumination levels exceed the 10.0 footcandle maximum allowed per Section 8.2.C.1. In addition, a review of the additional lighting details on the building plan sheets (E-201 & E-301) confirm that the proposed new wall-pack fixtures are not fully shielded and directed downward as required per Section 8.2.C.2. The following exterior lighting detail will need to be addressed by the applicant on a revised site plan:

   - ❑ Revise the photometric plan and the proposed exterior fixtures to provide all required exterior lighting information and to conform to Section 8.2 requirements.

5. **Section 8.1.B.6. - Environmental Performance Standards.** Applicant has confirmed that no hazardous materials will be stored, used or generated on-site.

6. **Section 9.1 - Parking.** With one exception, the proposed parking improvements conform to applicable Section 9 (Parking…) standards, but the required parking calculation details are missing from the site plan. From previous discussions with the project engineer, it is the understanding of staff that the existing parking areas are being expanded to accommodate a total of 30 – 40 anticipated employees for the new distribution center.

The following parking-related details will need to be addressed by the applicant on a revised site plan:

- ❑ Add parking calculations to the site plan based on anticipated use and number of employees.
- ❑ Remove from the site plan the northeastern-most proposed parking space and adjacent proposed pavement area for vehicles backing out of that space, as both areas of proposed pavement encroach into the minimum required front yard setback area.
- ❑ Remove the errant extra lines from the southeast group of parking spaces (nearest to the entrance drive) as depicted on sheet C-102.
- ❑ Correct the parking layout on all site plan sheets to be consistent with sheet C-102.

7. **Section 9.5 – Loading Space.** The modified loading dock area satisfies the minimum loading space requirement for this land use.

8. **Section 10. – Landscaping and Screening.** Other than lawn area around the perimeter, there is no existing landscaping on this site. Sheets C-103 and LP-1 provide details for new landscaping along the front of the expanded parking area, new hedgerow plantings around a ground-mounted transformer, and a new masonry block wall trash dumpster enclosure with opaque steel-reinforces gates. The landscape installation and maintenance plans conform to Section 10 standards. The number of new plantings is consistent with Section 10.2 (General Landscaping Requirements) as applied to the proposed project. There is one error on sheet LP-1 that will need to be corrected by the applicant on a revised site plan:

   - ❑ Twelve (12) "Keteleir Juniper" are listed in the Plant Data Chart, but only eleven (11) of these shrubs are depicted around the transformer unit.

9. **Outside agency approvals.** The applicant is responsible for obtaining all necessary permits or approvals from applicable outside agencies, prior to final site plan approval. For this project, documentation of permits or approvals from the Mt. Pleasant Fire Department, Isabella County Transportation Commission, Isabella County Road Commission, and Storm Water approval from the Isabella County Drain office are required. No documentation has been received by the Zoning Administrator from any of these agencies. Approval is also required from the Township's Public Services Department. In this case, the department has reviewed the plans and found them to be incomplete. The following details will need to be addressed by the applicant:

   - ❑ Add the location and layout of the existing water supply system serving the site.
   - ❑ Complete the plan submission and review process for each relevant outside agency.

Objective

The Planning Commission shall review the application materials and site plan, together with any reports and recommendations. The Planning Commission shall identify and evaluate all relevant factors and shall then take action by motion to approve the site plan, to approve the site plan

with conditions, to deny the site plan application, or to postpone further consideration of the site plan to a date certain in accordance with Section 14.2.H. of the Zoning Ordinance.

Key Findings

1. Although the applicant submitted a combined preliminary – final site plan application, the Planning Commission has the option to grant only preliminary site plan approval.
2. Site improvements includes improvements to pedestrian access, vehicular access, and off-street parking, along with new landscaping and exterior lighting.
3. The existing industrial building and parcel is a nonconforming site, and the scope of proposed site improvements are consistent with Section 12.5 (Nonconforming Site) provisions.
4. Outside agency approvals and several adjustments to proposed parking, landscaping, and exterior lighting details are needed for the final site plan to fully conform to the standards for final site plan approval found in Section 14.2.S. (Standards for Site Plan Approval).
5. The site plan is sufficiently complete for preliminary site plan approval, but is missing a number of items of required final site plan information.

Recommendations

Based on the above findings, I would ask that the Planning Commission consider taking action to approve the PSPR21-05 combined preliminary and final site plan, subject to the following conditions:

1. Add the missing items of required information per Section 14.2.P. to a revised site plan.
2. Correct and update the sidewalk, exterior lighting, parking, and landscaping details on a revised site plan to conform to Zoning Ordinance requirements.
3. Confirmation by the Zoning Administrator that all required documentation of permits or approvals have been received from the Mt. Pleasant Fire Department, the Isabella County Transportation Commission, the Isabella County Road Commission for the expanded driveway approach, the Isabella County Drain Commissioner's Office for stormwater management approval, and the Township's Public Services Department for water and sanitary sewer documentation, prior to issuance of a building permit.
4. Submittal of a revised final site plan for administrative review and acceptance by the Zoning Administrator, prior to issuance of a building permit.

Please contact me at (989) 772-4600 ext. 232, or via email at rnanney@uniontownshipmi.com, with any questions about this information.

Respectfully submitted,

Rodney C. Nanney, AICP
Community and Economic Development Director

Charter Township of Union

APPLICATION FOR SITE PLAN REVIEW

☐ Minor Site Plan ☑ Preliminary Site Plan ☑ Final Site Plan

A Completed Application will contain all the information required per the Zoning Ordinance, Section 14.2 (Site Plan Review).

Name of Proposed Development/Project: Project Sunshine

Common Description of Property & Address (if issued): 2266 Northway Drive, Mount Pleasant, MI 48858

Modifications to existing building and paving.

Applicant's Name(s): George Wellborn

Phone/Fax numbers: 404-946-2359 Email: George.Wellborn@cbre.com

Address: 3550 Lenox Road, Suite 2300 City: Atlanta, GA Zip: 30326

Legal Description: ☑ Attached ☐ Included on Site Plan Tax Parcel ID Number(s): 14-152-00-005-02

Existing Zoning: B-7 Land Acreage: 1.920 Existing Use(s): warehouse/distribution

☑ **ATTACHED: Letter describing the project and how it conforms to Section 14.2.S. (Standards for Site Plan Approval)**

Firm(s) or Individuals(s) who prepared site plan(s)	1. Name: Timothy Zimmer Phone: 810-225-7100 Email: tim@livingstoneng.com 2. Address: 3300 South Old US Highway 23 City: Brighton State: MI Zip: 48114 Contact Person: David LeClair Phone 810-225-7100
Legal Owner(s) of Property. All persons having legal interest in the property must sign this application. Attach a separate sheet if more space is needed.	1. Name: Ryan Smith, Avenue A Properties, LLC Phone: 989.708.6850 Address: 325 Enterprise Drive City: Breckenridge State: MI Zip: 48615 Signature: _____ Interest in Property: Owner 2. Name: _____ Phone: _____ Address: _____ City: _____ State: MI Zip: _____ Signature: _____ Interest in Property: owner/lessee/other

I do hereby affirm that all the statements, signatures, descriptions, exhibits submitted on or with this application are true and accurate to the best of my knowledge and that I am authorized to file this application and act on behalf of all the owners of the property. False or inaccurate information placed upon this plan may be cause for revocation of any permits issued pursuant to site plan approval and/or removal of work installed. Approval of this plan shall not constitute the right to violate any provisions of the Zoning Ordinance or other applicable codes and ordinances.

_____

Signature of Applicant Date

Office Use Only

Application Received By: _____ Fee Paid: $_____

Date Received: _____ Escrow Deposit Paid: $_____

Preliminary Site Plan Review Procedure

Each preliminary site plan application shall be made by filing one (1) completed and signed copy of the required application form, the required fee and any required escrow deposit, one (1) large (up to 24-inch by 36-inch maximum) printed site plan set, and eleven (11) paper copies and one (1) digital copy in .PDF format of the complete set of application materials and reduced 11-inch by 17-inch site plan sets at the Township Hall.

Effect of Preliminary Site Plan Approval

Approval of a preliminary site plan by the Planning Commission shall indicate its general acceptance of the proposed layout of buildings, streets, drives, parking areas, and other facilities and areas in accordance with the standards for preliminary site plan approval specified in subsection 14.2(S). The Planning Commission may, at its discretion and with appropriate conditions attached, authorize limited work to begin for soils exploration, incidental site clearing, and other preliminary site work as specified in the authorization.

Outside Agency Approvals

The applicant shall be responsible for obtaining all necessary permits or approvals from applicable outside agencies, prior to final site plan approval.

Final Site Plan Review Procedure

Each final site plan application shall be made by filing one (1) completed and signed copy of the required application form, the required fee and any required escrow deposit, one (1) large (up to 24-inch by 36-inch maximum) printed site plan set, and eleven (11) paper copies and one (1) digital copy in .PDF format of the complete set of application materials and reduced 11-inch by 17-inch site plan sets at the Township Hall.

Effect of Final Site Plan Approval

Approval of a final site plan by the Planning Commission constitutes the final zoning approval for the project and allows for issuance of a building permit to begin site work or construction, provided all other construction and engineering requirements have been met.

Minor Site Plan Review Procedure

A minor site plan application shall be made by filing one (1) completed and signed copy of the required application form, the required fee, and two (2) paper copies and one (1) digital copy in .PDF format of the complete set of application materials and site plans, at a maximum sheet size of 11 inches by 17 inches, at the Township Hall. The Zoning Administrator shall review the application materials and site plan for completeness, accuracy, and compliance with all applicable requirements and standards of this Ordinance and other Township ordinances.

The minor site plan shall be approved by the Zoning Administrator upon determination that all required information for the type of site plan has been provided per subsection 14.2(P), the site plan satisfies the applicable standards for site plan approval per subsection 14.2(S); and the site plan conforms to all other applicable requirements and standards of this Ordinance and other Township ordinances.

CHARTER TOWNSHIP OF UNION

SITE PLAN REVIEW
HAZARDOUS SUBSTANCES REPORTING FORM

This form must be completed and submitted as part of the site plan for facilities which may use, store, or generate hazardous substances or polluting materials (including petroleum-based products)

Name of business: _____

Name of business owner(s):

_____

Street and mailing address: _____

_____

Telephone:

Fax: _____

Email: _____

I affirm that the information submitted is accurate.

Owner(s) signature and date:

_____

_____

Information compiled by:

_____

_____

Types and Quantities of Hazardous Substances and Polluting Materials Used, Stored or Generated On-Site

Please list the hazardous substances and polluting materials (including chemicals, hazardous materials, petroleum products, hazardous wastes and other polluting materials) which are expected to be used, stored or generated on -site. Quantities should reflect the maximum volumes on hand at any time. Attach additional pages if necessary to list all hazardous substances and polluting materials.

COMMON NAME	CHEMICAL NAME (components)	FORM	MAX QUANTITY ON HAND AT ONE TIME	TYPE OF STORAGE CONTAINERS
_____ NONE	**KEY:** LiQ. = liquid P.LIQ = pressurized liquid S = solids G = gas PG = pressurized gas			**KEY:** AGT = above ground tank DM = drums UGT = underground tank Cy = cylinders CM = metal cylinders CW = wooden or composition container TP = portable tank

Section 14.2 Site Plan Review (excerpts)

A. Purpose and Scope.
The purposes of this Section are to establish uniform requirements of procedure for review of site plans for new development in the Township; to confirm compliance with this Ordinance and other Township ordinances prior to the start of construction; and to ensure that development in the Township is consistent with the adopted policies of the Township's Master Plan.

B. Authority.
Flexible standards have been established to ensure that the type of review and amount of required information is proportional to the project's scale and intensity. The Planning Commission shall have the authority to review and take action on preliminary site plan and final site plan applications and the Zoning Administrator shall have authority to review and take action on minor site plan applications, all in accordance with this Section and Ordinance.

1. Preliminary site plan. Requirements for a preliminary site plan are intended to allow for review of the general character of the proposed use(s), general site layout, and location of structures and other site improvements; and to confirm that the overall development can conform to Ordinance requirements.
2. Final site plan. A final site plan is a set of engineering, architectural, and/or landscape design drawings that satisfy all applicable requirements of this Ordinance and outside agencies with jurisdiction, which are prepared by registered design professionals based on an approved preliminary site plan and depict all planned building, pedestrian access, parking, grading, drainage, infrastructure, exterior lighting, and other site improvement details for a given lot and development project.
3. Minor site plan. The reduced information requirements for a minor site plan submittal, as specified in Section 14.2(P) (Required Site Plan Information), are intended to allow for administrative review of a limited range of low intensity projects that do not include significant engineering or design details.

C. Site Plan Approval Required.
No permits shall be issued, no construction of or addition to any structure shall take place, and no land use for which site plan approval is required shall be established or expanded until all required site plans have been approved in accordance with this Section and Ordinance. Except as permitted in accordance with this Section, no grading, grubbing, cutting of trees or other vegetation, excavation, landfilling, or construction of improvements shall commence for any development for which site plan approval is required until all required site plans have been approved in accordance with the following:

Site Plan Approval Required	Type of Approval Required			
	Preliminary Site Plan	Final Site Plan	Minor Site Plan	Exempt
Adult foster care large group homes, group child day care homes, and home-based limited businesses subject to special use permit approval in the zoning district per Section 3.			✔	
All other land uses subject to special use permit approval in the zoning district, and all land uses for which site plan approval is otherwise required by provisions of this Ordinance.	✔	✔		
Farm-based tourism and entertainment activities (agri-tourism), public stables, permanent auction facilities, and religious institutions as allowed in the Agricultural (AG) District per Section 3.	✔	✔		
Private off-road courses as allowed in the Agricultural (AG) District per Section 3.			✔	
Customary agricultural operations, private stables, and greenhouses as allowed in the Agricultural (AG) and Rural Residential (R-1) zoning districts per Section 3, provided that the structures and improvements shall conform to all applicable Ordinance standards.				✔
Construction, relocation or alteration of a two family (duplex) dwelling, detached single family dwelling or customary accessory structures on a single lot, provided that the structures and improvements shall conform to all applicable Ordinance standards.				✔

Site Plan Approval Required	Type of Approval Required			
	Preliminary Site Plan	Final Site Plan	Minor Site Plan	Exempt
Home occupations that conform to the requirements of Section 6.19.				✔
Family day care homes, adult foster care family homes and small group homes, and child foster family homes and family group homes, as licensed by the State of Michigan.				✔
Multiple-family residential buildings and uses, independent or dependent senior housing, assisted living facilities, nursing homes; homes for the aged, and religious institutions as allowed in the Residential Districts per Section 3.	✔	✔		
All land uses allowed in the Business Districts and Industrial Districts per Section 3.	✔	✔		
All planned unit development (PUD) projects, as approved by the Township Board in accordance with Section 3.18.	✔	✔		
Construction or expansion of buildings, equipment storage yards, and associated above-ground site improvements occupied by or intended for occupancy by essential services in any zoning district.	✔	✔		
The improvement, expansion, extension or abandonment of public or private overhead or underground utility lines or easements.				✔
Any development which would, if approved, provide for the establishment of more than one principal use or building on a lot.	✔	✔		
Establishment or alteration of a condominium subdivision of an existing building into separate units in accordance with the Condominium Act and Section 5.1 of this Ordinance provided that no new construction or alteration of existing buildings or site improvements are proposed or required, and compliance with the requirements and standards of this Ordinance will not be affected.			✔	
Establishment or alteration of any other condominium subdivision in accordance with the Condominium Act and Section 5.1.	✔	✔		
A change in use for an existing multiple-family, mixed use or non-residential building where the Zoning Administrator has determined that no new construction or alteration of the building or site improvements are required and compliance with the requirements and standards of this Ordinance will not be affected.			✔	
Any other change in use for an existing multiple-family, mixed use or non-residential building.	✔	✔		
Expansion of an existing multiple-family, mixed use or non-residential principal building of up to ten percent (10%) of the gross floor area, and any alterations that affect the exterior appearance, pedestrian access or function of the building without a floor area increase.			✔	
Expansion of an existing multiple-family, mixed use or non-residential principal building exceeding ten percent (10%) of the gross floor area.	✔	✔		
Relocation of a multiple-family, mixed use or non-residential building.	✔	✔		
Establishment or alteration of a multiple-family, mixed use or non-residential accessory use or structure where the Zoning Administrator has determined that compliance with the requirements and standards of this Ordinance will not be affected.			✔	
Any other establishment or alteration of any other multiple-family, mixed use or non-residential accessory use or structure,	✔	✔		
Expansion of any multiple-family, mixed use or non-residential off-street parking facility by up to 2,750 square feet.			✔	

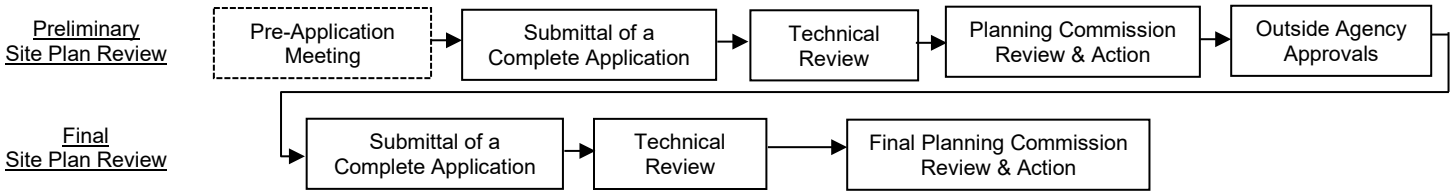
Site Plan Approval Required	Type of Approval Required			
	Preliminary Site Plan	Final Site Plan	Minor Site Plan	Exempt
Expansion of any multiple-family, mixed use or non-residential off-street parking facility exceeding 2,750 square feet.	✔	✔		
Construction, extension or alteration of a private road, as authorized by Ord. No. 2009-09, that is located outside of a subdivision plat.	✔	✔		
Incidental changes during construction due to unanticipated site constraints or outside agency requirements, and minor landscaping changes or species substitutions, consistent with an approved final site plan.			✔	
Incidental building modifications that do not significantly alter the facade, height or floor area of a multiple-family, mixed use or non-residential building.			✔	
Changes to a site required to comply with State Construction Code requirements.			✔	
Sidewalk or pedestrian pathway construction, or barrier-free improvements.			✔	
Construction of fences, exterior lighting improvements, or installation of screening around a waste receptacle, mechanical unit or similar equipment for a multiple-family, mixed use or non-residential use.			✔	
Re-occupancy of an existing multiple-family, mixed use or non-residential building that has been vacant for more than 365 calendar days, provided that no variances to the requirements of this Ordinance are required and the proposed use will be conducted within a completely enclosed building, and will not require access changes or other substantial modifications to the existing site.			✔	

1. Extraction operations. For extraction operations as authorized under the Township's Extraction Ordinance No. 20-01, Planning Commission approval of an Extraction Permit and associated mining and reclamation plans shall also constitute site plan approval for the use under this Ordinance.

2. Mobile home parks. Construction, expansion or alteration of a mobile housing park shall be subject to preliminary plan approval in accordance with Section 3.12 and the procedures and standards established under Section 11 of the Mobile Home Commission Act (Public Act 96 of 1987, as amended), as summarized below:

    a. The preliminary plan shall include the location, layout, general design, and general description of the project. The preliminary plan shall not include detailed construction plans.
    b. In preparing the preliminary plan and when reviewing the plan, the developer and Planning Commission shall generally follow the review procedure outlined in this Section for preliminary site plan approval, where applicable, except where pre-empted by requirements of the Mobile Home Commission Act or Manufactured Housing Rules.
    c. Pursuant to Section 11 of the Mobile Home Commission Act, the Planning Commission shall take action on the preliminary plan within 60 days after the Township officially receives the plan.

D. Summary of the Site Plan Review Processes.



NOTE: Applicant may combine preliminary and Final Site Plan Review, per Section 14.2(M)

P. Required Site Plan Information.

The following minimum information shall be included with any application for site plan approval, except where the Township Planner, Zoning Administrator or Planning Commission determines that an item of information is not applicable or necessary for review of the site plan:

Minimum Site Plan Information	Minor Site Plan	Preliminary Site Plan	Final Site Plan
SITE PLAN DESCRIPTIVE INFORMATION			
Name, address, and other contact information for the applicant and property owners, along with proof of ownership and signed consent if applicant is not the owner.	●	●	●
Name, address, and other contact information of the firm or individual preparing the site plan. Site plans prepared by an architect, community planner, engineer, landscape architect or land surveyor shall bear the individual's professional seal.	●	●	●
A final site plan shall be prepared and sealed by an architect, engineer, landscape architect or land surveyor registered in the State of Michigan.			●
Location, address(es), and tax identification number(s) of subject parcel(s); dimensions of the site, and the gross and net land area.	●	●	●
Legal description(s) of the subject parcel(s).		●	●
Legal description of the proposed development site and any non-contiguous open space area(s), if different from the subject parcel(s), with lot line angles or bearings indicated on the plan. Dimensions, angles, and bearings shall be based upon a boundary survey prepared by a registered surveyor.		●	●
Details of existing and proposed covenants or other restrictions imposed upon land or buildings, including bylaws, deed restrictions, and articles of incorporation for a cooperative, condominium, or homeowners' association.			●
Description of applicant's intentions regarding selling or leasing of all or portions of land, dwelling units or building spaces.		●	●
Residential projects: Gross and net dwelling unit density, lot area per dwelling unit, and a schedule of the number, sizes (bedrooms, floor areas), and types of dwellings.		●	●
A detailed use statement describing proposed use(s); including land or building areas for each use, number of units, number of anticipated employees, or other applicable information to verify Ordinance compliance.	●	●	●
SITE PLAN DATA AND NOTES			
Minor site plans shall be drawn to a scale appropriate for the sheet size and of such accuracy that the Zoning Administrator can readily interpret the plan.	●		
Preliminary and final site plans shall be drawn to an engineer's scale not greater than 1:50 and legible at the required sheet size. For a large development shown in sections on multiple sheets, one overall composite sheet shall be provided for clarity.		●	●
Vicinity map showing the general location of the site, map scale, north arrow, initial plan date, and any revision date(s).	●	●	●
Existing zoning classification(s) for the subject parcel(s) and surrounding parcels (including across road rights-of-way).		●	●
Owners' names, existing uses, and location of structures, drives, and improvements on surrounding parcels (including across rights-of-way).		●	●
Identification of all adjacent property in which the applicant(s), developer(s), or owner(s) have an ownership interest.		●	●
Dimensions of all property boundaries and interior lot lines.	●	●	●
Calculations for parking, lot coverage, total ground floor area, and other applicable Ordinance requirements.	●	●	●

Minimum Site Plan Information	Minor Site Plan	Preliminary Site Plan	Final Site Plan
EXISTING CONDITIONS			
Location of existing structures, fences, and driveways on the subject property, with notes regarding their preservation or alteration.	●	●	●
Location of existing walls, signs, utility poles and towers, pipelines, excavations, bridges, culverts, and other site features on the subject property, with notes regarding their preservation or alteration.		●	●
SITE PLAN DETAILS			
Delineation of required yards, and other setback areas and open space.	●	●	●
Identification of general location(s) and area(s) of each development phase; and the planned construction program and schedule for each development phase.		●	●
Location, width, purpose, and description of all existing and proposed easements and rights-of-way on or adjacent to the site.	●	●	●
Location, type, area, height, and lighting specifications of proposed signs.	●		●
An exterior lighting plan with all existing and proposed lighting locations, heights from grade, specifications, lamps types, and methods of shielding.	●		●
Location, area, and dimensions of any outdoor sales, display or storage areas.	●	●	●
Location of proposed outdoor waste receptacle enclosures; with size, elevation, and vertical cross-section showing materials and dimensions; indication how recycling will be implemented.		●	●
BUILDING DESIGN AND ORIENTATION			
Location, outline, ground floor area, and height of proposed structures; and of existing structures to remain on-site.	●	●	●
Dimensions, number of floors, and gross and net floor area of proposed principal buildings; and of existing principal buildings to remain on-site.		●	●
Separation distances between adjacent buildings, and between buildings and adjacent lot boundaries.		●	●
Detailed exterior building façade elevation drawings for all proposed dwellings, principal buildings, and additions, drawn to an appropriate scale and indicating types, colors, and dimensions of finished wall materials.		●	●
Finished floor elevations and contact grade elevations for proposed principal buildings and existing principal buildings to remain on-site, referenced to a common datum acceptable to the Township Engineer.			●
ACCESS AND CIRCULATION			
Locations, layout, surface type, centerlines, road pavement and right-of-way widths, and indication of public or private road status for all existing and proposed roads and access drives serving the site.		●	●
Conceptual locations, layout, and surface type for all parking lots, sidewalks, and pedestrian pathways within and accessing the site.	●	●	●
Locations and dimensions of vehicle access points, and distances between adjacent or opposing driveways and road intersections.	●	●	●
Details of the location, width, and paving of proposed sidewalks and pedestrian ways, including alignment, cross section, connections to existing or planned off-site facilities, and easement or right-of-way dedications.	●		●
Parking space dimensions, pavement markings, and traffic control signage.	●	●	●

Minimum Site Plan Information	Minor Site Plan	Preliminary Site Plan	Final Site Plan
Parking space angles; maneuvering aisle, island, and median dimensions; surface type; fire lanes; drainage patterns; location of loading areas; and typical cross-section showing surface, base, and sub-base materials.		●	●
Identification of proposed names for new public or private roads serving the site.		●	●
Spot elevations for existing roads on and adjacent to the subject parcel(s), including surface elevations at intersections with the internal roads and drives serving the proposed development; curve-radii and road grades; location and details of curbs, and turning lanes; and typical road cross sections showing surface, base, and sub-base materials and dimensions.			●
NATURAL FEATURES AND OPEN SPACE AREAS			
A general description and preliminary delineation of existing natural features on and abutting the site.		●	●
Details of all existing natural features on the site; indications of features to be preserved, removed, or altered; and any mitigation measures as may be required by Township ordinance or state statute.			●
Outdoor open space and recreation areas; location, area, and dimensions.		●	●
Description of the organization that will own and maintain open space and recreation areas, and a long-term maintenance plan for such areas.			●
SCREENING AND LANDSCAPING			
General layout of proposed landscaping and screening improvements; including plantings, topographic changes, and similar features.	●	●	●
A detailed landscape plan, including location, size, quantity and type of proposed plant materials and any existing plant materials to be preserved.			●
Planting list for all landscape materials, with the method of installation, botanical and common name, quantity, size, and height at planting.			●
Landscape maintenance plan, including notes regarding replacement of dead or diseased plant materials.			●
Proposed fences, walls, and other screening devices, including typical cross section, materials, and height above grade.	●	●	●
Screening methods for any waste receptacle areas, ground-mounted generators, transformers, mechanical (HVAC) units, and similar devices.	●	●	●
UTILITIES, STORMWATER MANAGEMENT, AND GRADING			
General layout of existing and proposed water supply systems, sanitary sewerage or septic systems, and stormwater management facilities.		●	●
Details of the location, layout, and size or capacity of the existing and proposed potable water supply and sewage treatment and disposal facilities serving the site, including line sizes, inverts, hydrants, flow patterns, manholes, and catch basins.			●
Location, size, and slope of proposed detention or retention ponds; and location and size of underground tanks and drain lines where applicable.			●
Calculations for capacity of stormwater management and drainage facilities.			●
Location and size of existing and proposed telephone, gas, electric, and similar utility lines and surface-mounted equipment.			●
General areas of intended filling or cutting.		●	●
Directional arrows showing existing and proposed drainage patterns on the lot.	●		●

Minimum Site Plan Information	Minor Site Plan	Preliminary Site Plan	Final Site Plan
A detailed grading plan, with details of proposed filling or cutting, existing and proposed topography at a minimum of two (2) foot contour levels, stormwater runoff drainage patterns, and a general description of grades within 100 feet of the site. All finished contour lines are to be connected to existing contour lines within the site or at the parcel boundaries.			●
Locations, dimensions, and materials of proposed retaining walls, with fill materials and typical vertical sections.		●	●
Description of measures to control soil erosion and sedimentation during construction operations, and until permanent groundcover is established.			●
Other information as requested by the Township Planner, Zoning Administrator or Planning Commission to verify compliance with the standards and conditions imposed by this Ordinance, the policies of the Township Master Plan, and other applicable Township ordinances or state statutes.	●	●	●

Q. Expiration and Extension of Site Plan Approval.
Site plan approvals shall expire and may be extended in accordance with the following:

1. Expiration of preliminary site plan approval. Approval of a preliminary site plan shall be valid for a period of 545 calendar days from the date of approval and shall expire and be of no effect unless an application for final site plan approval for all or part of the area included in the approved preliminary site plan is filed with the Township Clerk within that time period.

2. Expiration of final site plan approval. A final site plan shall expire and be of no effect unless construction has begun on the property and is diligently pursued in conformance with the approved final site plan within 545 calendar days of the final site plan approval.

3. Extension of preliminary or final site plan approval. The Planning Commission may, at its discretion and upon written request and showing of good cause by the applicant, grant an extension of a preliminary or final site plan approval for up to 365 calendar days, provided that site conditions have not changed in a way that would affect the character, design or use of the site, and that the approved site plan remains in conformance with applicable provisions of this Ordinance.

4. Expiration of Minor Site Plan Approval. A minor site plan shall expire and be of no effect unless, within 365 calendar days of approval, appropriate permits have been approved, construction has begun on the property, and such work is diligently pursued in conformance with the approved minor site plan. No extensions of minor site plan approval shall be granted by the Zoning Administrator.

R. Phasing of Development.
The applicant may divide the development into two (2) or more phases. Phasing shall be subject to the following requirements:

1. In the case of a phased development, the preliminary site plan shall cover the entire property involved and shall clearly indicate the location, size, and character of each phase.

2. In the case of a phased development, a final site plan shall be submitted for review and approval for each phase.

3. A phase shall not be dependent upon subsequent phases for safe and convenient vehicular and pedestrian access, adequate utility services, or open spaces and recreation facilities, and shall be capable of substantial occupancy, operation, and maintenance upon completion of construction and development.

4. The Township Planner or Planning Commission may require the applicant to post an acceptable performance guarantee to ensure that vehicular and pedestrian ways, utility services, open space and recreation facilities, and other amenities and infrastructure planned for later phases of the development are completed in a timely fashion.

S. Standards for Site Plan Approval.
In reviewing a minor, preliminary or final site plan, the Zoning Administrator or Planning Commission shall determine that the following standards are met, as applicable to the type of site plan:

Standards for Site Plan Approval	Minor Site Plan	Preliminary Site Plan	Final Site Pan
The applicant is legally authorized to apply for site plan approval, and all required information has been provided.	●	●	●
The proposed development conforms to the applicable standards and conditions imposed by this Ordinance and other applicable Township ordinances.	●	●	●
The final site plan is consistent with the policies of the Master Plan and other adopted Township planning documents, and with the approved preliminary site plan.			●
The proposed development will be harmonious with and not harmful, injurious, or objectionable to the environment or land uses in surrounding area.	●	●	●
The proposed development respects natural topography, floodways, and floodplains; and minimizes the amount and extent of cutting and filling.		●	●
Organic, wet, or other soils that are not suitable for development will be undisturbed or modified in such fashion as to make development feasible.		●	●
The movement of the vehicular and pedestrian traffic within the site and in relation to access streets and sidewalks will be safe and convenient.	●	●	●
The proposed development is adequately coordinated with improvements serving the area, and with other existing or planned development in the vicinity.		●	●
Satisfactory and harmonious relationships will exist between the proposed development and the existing and planned development of contiguous lands and the surrounding area, including provisions for proper extensions of public roads and sidewalks through the development in accordance with the Township ordinances.		●	●
Development phases are in logical sequence so that any phase will not depend upon a subsequent phase for access, utilities, drainage or erosion control.		●	●
The plan, including all engineering drawings, meets Township standards for fire and police protection, water supply, sewage disposal or treatment, storm drainage, and other public facilities and services.			●
The drainage plan conforms to applicable drainage and stormwater management standards, and any proposed improvements are adequate to handle anticipated stormwater runoff and accommodate upstream drainage without causing undue runoff on to neighboring property or overloading of area watercourses.			●
Proposed screening, buffering, and landscaping improvements are adequate for the location and intended purpose and conform to the standards of this Ordinance.	●		●
Exterior lighting conforms to Ordinance requirements and standards, and will not adversely affect adjacent or neighboring properties or traffic on adjacent roads.	●		●
The parking layout and vehicular circulation patterns and access points to the site are adequate to serve the proposed uses and will not adversely affect the flow of traffic on adjacent roads or create pedestrian-vehicle conflicts.	●		●
Grading or filling will not destroy or adversely affect the character of the property, adjacent properties or the surrounding area.			●
Erosion will be controlled during and after construction and will not adversely affect adjacent or neighboring property or public facilities or services.			●
The plan meets applicable standards of governmental agencies with jurisdiction, and necessary outside agency approvals have been obtained or are assured.	●		●

PERMIT INFORMATION CHECKLIST FOR FINAL SITE PLANS

Michigan.gov/EGLEpermits

The Michigan Department of Environment, Great Lakes, and Energy (EGLE) has prepared a list of key questions to help identify what EGLE permits, licenses, or approvals of a permit-like nature may be needed. By contacting the appropriate offices indicated, you will help reduce the possibility that your project or activity will be delayed due to the untimely discovery of additional permitting requirements later in the construction process. While this list covers the existence of permits and approvals required from EGLE, it is not a comprehensive list of all legal responsibilities. A useful way to learn whether other requirements will apply is to go through the Self-Environmental Assessment in the Michigan Guide to Environmental, Health, and Safety Regulations, online at: Michigan.gov/EHSguide. Please call the Environmental Assistance Center at 800-662-9278 to talk with any of the EGLE programs noted below. [insertions and edits by Union Township]

How Do I Know that I Need a State of Michigan, County or Local Permit or Approval?	**Yes** ☐	**No** ☐
1) Will your business involve the installation or construction of any process equipment that has the potential to emit air contaminants (e.g. dry sand blasting, boilers, standby generators)? Air Quality Permit to Install, Air Quality Division (AQD), Permit Section	Y☐	N☐
2) Does the project involve renovating or demolishing all or portions of a building? Notification is required for asbestos removal and required for all demolitions even if the structure never contained asbestos. Asbestos Notification, AQD, Asbestos Program, 517-284-6777	Y☐	N☐
3) Please consult the Permitting at the Land and Water Interface Decision Tree document to evaluate whether your project needs a land and water management permit (i.e., Does the project involve filling, dredging, placement of structures, draining, or use of a wetland?). Land and Water Featured Programs (Water Resources Division - WRD) - Joint Permit Application, 517-284-5567:		
a. Does the project involve construction of a building or septic system in a designated Great Lakes high risk erosion area?	Y☐	N☐
b. Does the project involve dredging, filling, grading, or other alteration of the soil, vegetation, or natural drainage, or placement of permanent structures in a designated environmental area?	Y☐	N☐
c. Does the project propose any development, construction, silvicultural activities or contour alterations within a designated critical dune area?	Y☐	N☐
d. Does the project involve construction of a dam, weir or other structure to impound flow?	Y☐	N☐
4) Does the project involve an earth change activity (including land balancing, demolition involving soil movement, and construction) or does the project involve construction which will disturb one or more acres that come into contact with storm water that enters a storm sewer, drain, lake, stream, or other surface water? **Union Township and Isabella County**	Y☐	N☐
5) Does the project involve the construction or alteration of a water supply system system? **Union Township Public Services Department** and Drinking Water & Environmental Health Division (DWEHD), 517-284-6524	Y☐	N☐
6) Does the project involve construction or alteration of any sewage collection or treatment facility? **Union Township Public Services Department** and WRD, Part 41 Construction Permit Program (staff), 906-228-4527, or EGLE District Office	Y☐	N☐
7) Public Swimming Pool Construction (Spas/Hot Tubs) Permits: Will your business involve the construction or modification of a public swimming pool, spa or hot tub? **Union Township** and Public Swimming Pool Program, 517-284-6541, or EGLE District Office	Y☐	N☐
8) Does the project involve the construction or modification of a campground? **Union Township** and DWEHD,Campgrounds program, 517-284-6529	Y☐	N☐

9)	Does the project involve construction of a facility that landfills, transfers, or processes of any type of solid non-hazardous waste on-site, or places industrial residuals/sludge into or onto the ground? Materials Management Division (MMD), Solid Waste, 517-284-6588, or EGLE District Office	Y☐ N☐
10)	Does the project involve the construction of an on-site treatment, storage, or disposal facility for hazardous waste? MMD, Hazardous Waste Section, Treatment, Storage and Disposal, 517-284-6562	Y☐ N☐
Who Regulates My Drinking (Potable) Water Supply?		
11)	I am buying water from the municipal water supply system Contact the **Union Township Public Services Dept.**	Y☐ N☐
12)	I have a Non-Community Water Supply (Type II) Guide, Contact (District or County) Local Health Department, 517-485-0660	Y☐ N☐
13)	I am a community water supply (Type I) Community Water Supply, DWEHD District Office Community Water Supply Program, 517-284-6512	Y☐ N☐
14)	Do you desire to develop a withdrawal of over 2,000,000 gallons of water per day from any source including groundwater, inland surface water, or the Great Lakes and their connecting waterways? WRD, Great Lakes Shorelands Unit, Water Use Program, 517-284-5563	Y☐ N☐
Who Regulates My Wastewater Discharge System?		
15)	NPDES: Does the project involve the discharge of any type of wastewater to a storm sewer, drain, lake, stream, or other surface water? WRD, EGLE District Office, or National Pollutant Discharge Elimination (NPDES) Permit Program, 517-284-5568	Y☐ N☐
16)	Does the facility have industrial activity that comes into contact with storm water that enters a storm sewer, drain, lake, stream, or other surface water? WRD, Permits Section, or EGLE District Office, 517-284-5588	Y☐ N☐
17)	Does the project involve the discharge of wastewaters into or onto the ground (e.g. subsurface disposal or irrigation)? WRD, Groundwater Permits Program, 517-290-2570	Y☐ N☐
18)	Does the project involve the drilling or deepening of wells for waste disposal? Oil, Gas and Minerals Division (OGMD), 517-284-6841	Y☐ N☐
What Operational Permits Are Relevant to My Operation and Air Emissions?		
19)	Renewable Operating Permit: Does your facility have the potential to emit any of the following: 100 tons per year or more of any criteria pollutant; 10 tons per year or more of any hazardous air pollutant; or 25 tons per year or more of any combination of hazardous air pollutants? AQD, Permit Section, 517-284-6634	Y☐ N☐
20)	Does your facility have an electric generating unit that sells electricity to the grid and burns a fossil fuel? AQD, Acid Rain Permit Program, 517-780-7843	Y☐ N☐
What Operational Permits Are Relevant to My Waste Management?		
21)	Does the project involve landfilling, transferring, or processing of any type of solid non-hazardous waste on-site, or placing industrial residuals/sludge into or onto the ground? MMD, 517-284-6588 or EGLE District Office	Y☐ N☐
22)	Does the project involve the on-site treatment, storage, or disposal of hazardous waste? MMD, Hazardous and Liquid Waste, 517-284-6562	Y☐ N☐
23)	Does the project require a site identification number (EPA number) for regulated waste activities (used oil, liquid waste, hazardous waste, universal waste, PCBs)? (Hazardous Waste Program Forms & License Applications) MMD, EGLE District Office, 517-284-6562	Y☐ N☐

24) Does the project involve the receipt, possession, manufacture, use, storage, transport, transfer, release, or disposal of radioactive material in any form? MMD, Radioactive Material and Standards Unit, 517-284-6581	Y☐	N☐
25) Does the project involve decommissioning or decontamination of tanks, piping, and/or appurtenances that may have radioactive levels above background? MMD Radioactive Material and Standards Unit, 517-284-6581	Y☐	N☐
26) Does the project involve the generation of medical waste or a facility that treats medical waste prior to its disposal? MMD, Medical Waste Regulatory Program, 517-284-6594	Y☐	N☐
What Sector-Specific Permits May be Relevant to My Business?		
Transporters		
27) Does the project involve the *transport* of some other facility's non-hazardous liquid waste? MMD, Transporter Program, 517-284-6562	Y☐	N☐
28) Does the project involve the *transport* of hazardous waste? MMD, Transporter Program, 517-284-6562	Y☐	N☐
29) Do you engage in the business of transporting bulk water for drinking or household purposes (except for your own household use)? DWEHD, Water Hauler Information, 517-284-6527	Y☐	N☐
30) Does the project involve *transport* of septic tank, cesspool, or dry well contents or the discharge of septage or sewage sludge into or onto the ground? DWEHD, Septage Program, 517-284-6535	Y☐	N☐
31) Do you store, haul, shred or process *scrap tires*? MMD, Scrap Tire Program, 517-284-6586	Y☐	N☐
Sectors		
32) Is the project a *dry cleaning* establishment utilizing perchloroethylene or a flammable solvent in the cleaning process? AQD, Dry Cleaning Program, 517-284-6780	Y☐	N☐
33) Does your *laboratory* test potable water as required for compliance and monitoring purposes of the Safe Drinking Water Act? Laboratory Services Certifications, 517-284-5424	Y☐	N☐
34) Does the project involve the operation of a *public swimming pool*? DWEHD, Public Swimming Pools Program, 517-284-6529	Y☐	N☐
35) Does the project involve the operation of a *campground*? **Union Township** and DWEHD, Campgrounds, 517-284-6529	Y☐	N☐
What Permits Do I Need to Add Chemicals to Lakes and Streams?		
36) Are you applying a chemical treatment for the purpose of aquatic nuisance control (pesticide/herbicide etc.) in a water body (i.e. lake, pond or river)? WRD, Aquatic Nuisance Control , 517-284-5593	Y☐	N☐
37) Are you applying materials to a water body for a water resource management project (i.e. mosquito control treatments, dye testing, or fish reclamation projects)? WRD, Surface Water Assessment Section, 517-331-5228	Y☐	N☐

Why would I be subject to Oil, Gas and Mineral Permitting?	
38) Do you want to operate a central production facility (applies to oil and gas production facilities where products of diverse ownership are commingled)? OGMD, Petroleum Geology and Production Unit, 517-284-6826	Y☐ N☐
39) Does the project involve the removal of sand from a sand dune area within two (2) miles of a Great Lakes shoreline? OGMD, Minerals and Mapping Unit, Sand Dune Mining Program, 517-284-6826	Y☐ N☐
40) Does the project involve decommissioning or decontamination of tanks, piping, and/or appurtenances that may have radioactive levels above background? MMD, Radioactive Protection Programs, 517-284-6581	Y☐ N☐
Petroleum & Mining, OGMD, 517-284-6826 41) Does the project involve the diversion and control of water for the mining and processing of low-grade iron ore? 42) Does the project involve the surface or open-pit mining of metallic mineral deposits? 43) Does the project involve the mining of nonferrous mineral deposits at the surface or in underground mines? 44) Does the project involve mining coal? 45) Does the project involve changing the status or plugging of a mineral well? 46) Does the project involve the drilling or deepening of wells for brine production, solution mining, storage, or as test wells?	Y☐ N☐ Y☐ N☐ Y☐ N☐ Y☐ N☐ Y☐ N☐

Contact **Union Township** and EGLE Permits & Bonding, OGMD, 517-284-6841

CBRE | HEERY

999 Peachtree Street, NE
Atlanta, Georgia 30309

+1 404 881 9880 Tel
+1 404 875 1283 Fax
www.heery.com

April 26, 2021

Mr. Richard Nanney, Community and Economic Development Director
Charter Township of Union
2010 South Lincoln Road
Mount Pleasant, MI 48858

Subject: Site Plan Review for 2266 Northway Drive.

Dear Mr. Nanney:

The "Application for Site Plan Review" form refers to attached bits of information. The requested information is provided below.

Legal Description:
T14N R4W Sec 13 Enterprise Park, Lot 5; except all that part lying east of a line commencing at the southeast corner of lot 5; thence south 76° 53' 31" west, 66.52 feet; thence north 5° 55' 10" west, 184.61 feet; then north 88° 49' 18" west, 191.22 feet; thence north 52° 59' 47"west, 127.55 feet; thence north 0° 38' 26" west, 141.67 feet to point of beginning.

Description of Project:
The project is to renovate the interior of an existing tenant suite at 2266 Northway Drive into a warehouse/distribution facility with accessory support office space. Goods are to be delivered, sorted, and distributed on the same day. One exterior canopy will be added. Some improvements the access driveway and parking are included.

Our sitework is to support the tenant's function and to enhance safety; so, some modifications are required to the site. Our work strives to comply with the applicable requirements of section 14.2.S of the zoning ordinance. These are the principal changes:

1. To improve two-way traffic flow, box truck maneuverability, and overall safety, the existing asphalt entrance drive is proposed to be widened from approximately 20 feet wide to 30 feet wide, with one lane of traffic in each direction.

2. New asphalt pavement is being added to provide the required parking for the tenant, with new concrete sidewalks for pedestrian access from the new parking to the entrance.

3. Existing parking spaces are to be re-striped.

Thank you for your consideration,

George Wellborn
Sr. Architectural Project Manager

XSA1 - MT. PLEASANT, MI (LARGE)

2266 NORTHWAY DRIVE, MOUNT PLEASANT, MI 48858

PROJECT DESCRIPTION

PROJECT NAME	PROJECT SUNSHINE XSA1
ARCHITECT'S JOB #	2024200-05
JURISDICTION	THE COUNTY OF ISABELLA
PROJECT SCOPE RENOVATE:	
1ST FLOOR TENANT UTILIZED - USABLE/NET AREA 1ST FLOOR TOTAL LEASABLE AREA	11,446 SF 22,526 SF
BUILDING HEIGHT	EXISTING
PRIMARY USE CLASS FOR BASE BUILDING	MIXED USE (F-1 AND S-1)
NFPA USE CLASS FOR PROJECT AREA	STORAGE
CONSTRUCTION TYPE	MBC - TYPE IIA NFPA 101 - TYPE II (222)
NUMBER OF FLOORS	1
SPRINKLERED	NO
OCCUPANT LOAD	36

SHEET INDEX

SHEET NUMBER	SHEET TITLE	Sheet Issue Date
GENERAL		
G-001	SHEET INDEX/GENERAL PROJECT INFORMATION	03/16/21
G-002	GENERAL MOUNTING HTS. & CLEARANCES SCHEDULE	03/16/21
G-003	TENANT / CONTRACTOR EQUIPMENT MATRIX	03/16/21
G-100	LIFE SAFETY PLAN	03/16/21
G-200	SITE FLOW DIAGRAM	03/16/21
G-301	CANOPY MANUFACTURER DETAILS (BASIS OF DESIGN)	03/16/21
G-302	DOCK MANUFACTURER/ BOLLARD DETAILS (BASIS OF DESIGN)	03/16/21
CIVIL		
C-100	EXISTING CONDITIONS AND REMOVALS	04/26/21
C-101	GRADING & SESC PLAN	04/26/21
C-102	SITE LAYOUT	04/26/21
C-103	DETAILS	04/26/21
LANDSCAPE		
LP-1	LANDSCAPE PLANTING PLAN	04/26/21
ARCHITECTURAL		
AD-110	DEMOLITION PLAN - LEVEL 01	03/16/21
A-101	CONSTRUCTION PLAN - LEVEL 01	03/16/21
A-131	REFLECTED CEILING PLAN - LEVEL 01	03/16/21
A-441	ENLARGED PLANS - LEVEL 01	03/16/21
A-620	PARTITIONS, DOOR SCHEDULE, DOOR TYPES AND FRAMES	03/16/21
A-621	SIGNAGE TYPES	03/16/21
A-622	ADA SIGNAGE STANDARDS & MOUNTING HTS.	03/16/21
PLUMBING		
P-001	PLUMBING GENERAL NOTES, LEGENDS, DETAILS, AND SCHEDULES	03/16/21
MECHANICAL		
M-001	MECHANICAL LEGENDS, ABBREVIATIONS, AND DRAWING LIST	03/16/21
M-002	MECHANICAL SPECIFICATIONS	03/16/21
M-101	MECHANICAL HVAC PLAN	03/16/21
ELECTRICAL		
E-001	ELECTRICAL LEGEND & GENERAL NOTES	03/16/21
E-002	ELECTRICAL SPECIFICATIONS	03/16/21
E-101	ELECTRICAL POWER PLAN - LEVEL 01	03/16/21
E-201	ELECTRICAL LIGHTING PLAN - LEVEL 01	03/16/21
E-202	EXTERIOR PHOTOMETRIC LIGHTING PLAN	04/26/21
E-301	ELECTRICAL SINGLE LINE DIAGRAMS AND SCHEDULES	03/16/21

PROJECT SUMMARY

GENERAL PROJECT DESCRIPTION:
RETROFIT EXISTING FACILITY TO CREATE A PACKAGE DISTRIBUTION CENTER. THIS PROGRAM INCLUDES INBOUND BOX TRUCK(S) DELIVERING LOADED CARTS FROM AN UPSTREAM DISTRIBUTION SITE. CARTS WILL BE MOVED INTO AND OUT OF THE FACILITY MANUALLY (NO FORKLIFTS IN USE). INDIVIDUAL DRIVERS WILL LOAD PACKAGES FROM CARTS TO VEHICLES FOR FINAL DELIVERY. PROGRAM INCLUDES EMPLOYEE WELLNESS AREAS INCLUDING A BREAKROOM, RESTROOMS, AN OFFICE AND A MOTHER'S ROOM. VARIOUS UPGRADES WILL BE MADE TO WELLNESS AND WAREHOUSE AREAS TO MEET TENANT STANDARDS.

DETAILED DESCRIPTION OF SCOPE (NOT ALL-INCLUSIVE; SEE DRAWINGS FOR FULL SCOPE):

- REPLACE EXISTING DOCK EQUIPMENT AS INDICATED
- NEW INTERIOR "SIDE-OFF" SPEEDLIFT
- EXPAND AND CONVERT MEN'S SINGLE-USER RESTROOM TO ADA UNISEX RESTROOM
- NEW BREAKROOM MILLWORK
- CONVERT (1) OFFICE TO MOTHER'S ROOM/CONTEMPLATION ROOM
- NEW DEMISING WALL
- NEW OUTBOUND PERSONNEL DOORS IN EXISTING METAL-CLAD WALL AND CANOPY
- NEW DOORS, FRAMES AND HARDWARE THROUGHOUT
- NEW SIGNAGE THROUGHOUT
- MECHANICAL AND ELECTRICAL MODIFICATIONS
- PARKING LOT REPAIRS, WHEELSTOPS, PAVEMENT STRIPING
- NEW LIGHT POLES AND EXTERIOR WALL-PACKS
- NEW SITE SIGNAGE
- NEW BOLLARDS

***NOTICE OF PRODUCTS AND EQUIPMENT WITH LONG LEAD TIMES:**
CONTRACTOR IS ENCOURAGED TO MAKE CONTACT WITH ALL VENDORS, MANUFACTURES, AND SUBCONTRACTORS OF ALL EQUIPMENT AND PRODUCTS DOCUMENTED WITHIN THE CONTRACT THAT REQUIRE LONG LEAD TIMES (SEE VENDOR CONTACTS).

- PANELBUILT (CANOPY PRODUCT MANUFACTURER)
- DOCKZILLIA (RECEIVING DOCK PRODUCT AND EQUIPMENT MANUFACTURER)
- SUPERIOR HANDLING EQUIPMENT (SPEEDLIFTS)
- DH PACE (DOOR HARDWARE)
- LITHONIA LIGHTING (CPX LED, LED LAY-IN PANEL)

VENDOR CONTACTS

CANOPY DESIGNER: NUTEC - WWW.TEAMNUTEC.COM
DAVID ATKINS
OFFICE: 717-434-1505
DATKINS@TEAMNUTEC.COM

CANOPY MANUFACTURER: PANELBUILT - WWW.PANELBUILT.COM
MAIN OFFICE - 302 BEASLEY ST. BLAIRSVILLE GA 30512
LUIS FAJARDO - SALES ACCOUNT MANAGER
OFFICE: 1-800-636-3873 EXT-269
LFAJARDO@PANELBUILT.COM

DOCK EQUIPMENT AND PRODUCTS: DOCKZILLA - WWW.DOCKZILLA.COM
MAIN OFFICE - 12400 WHITEWATER DRIVE SUITE 110 MINNETONKA MN 55343
GRANT LEUM - OWNER
OFFICE: 952-956-6811
GLEUM@DOCKZILLA.COM

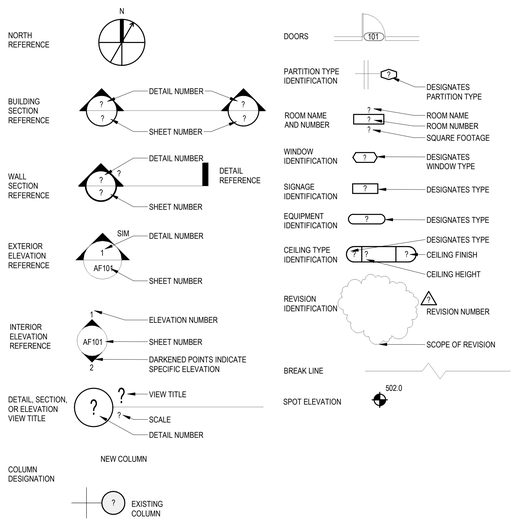
SPEEDLIFT: SUPERIOR HANDLING EQUIPMENT - WWW.SUPERIORLIFTS.COM
MAIN OFFICE - 8 AVIATOR WAY, ORMOND BEACH, FL 32174
KEVIN MANLEY
OFFICE: 386-677-0004
KMANLEY@SUPERIORLIFTS.COM

DOOR HARDWARE: D.H. PACE NATIONAL ACCOUNTS - WWW.DHPACE.COM
MAIN OFFICE: 1901 E. 119TH ST. OLATHE KS 66061
OFFICE: 1-800-636-3873 816-480-2600
AMAZONDOORS@DHPACE.COM

ABBREVIATIONS

ACC	ACCESSIBLE	HC	HANDICAPPED
ACOUS	ACOUSTICAL	HM	HOLLOW METAL
ADDL	ADDITIONAL	HP	HIGH POINT
ALT	ALTERNATE	HT	HEIGHT
AB	ANCHOR BOLT	H.TP	HIGH TEMPERATURE
&	AND	H.O.	HOLD OPEN
ALUM.	ALUMINUM	HORIZ	HORIZONTAL
A.F.F.	ABOVE FINISHED FLOOR	IF	INSIDE FACE
∠	ANGLE	INSUL	INSULATION
ARCH	ARCHITECTURAL	INT	INTERIOR
@	AT	JT	JOINT
BLKG	BLOCKING	LT WT	LIGHT WEIGHT
BM	BEAM	LLH	LONG LEG HORIZONTAL
BRG	BEARING	LLV	LONG LEG VERTICAL
BOT	BOTTOM	LP	LOW POINT
B.O.	BOTTOM OF	ME	MATCH EXISTING
BLDG	BUILDING	MFR	MANUFACTURER
℄	CENTER LINE	MO	MASONRY OPENING
CLG	CEILING	MAT'L	MATERIAL
COL	COLUMN	MAX	MAXIMUM
CONC	CONCRETE	MECH	MECHANICAL
CMU	CONCRETE MASONRY UNIT	MIN	MINIMUM
CFMS	COLD FORM METAL STUD	MISC	MISCELLANEOUS
CONN	CONNECTION	NOM	NOMINAL
CONST	CONSTRUCTION	NIC	NOT IN CONTRACT
CJ	CONTROL JOINT	NTS	NOT TO SCALE
CONT	CONTINUOUS	O.C.	ON CENTER
CONTR	CONTRACTOR	OPNG	OPENING
CORR	CORRIDOR	OPP	OPPOSITE
CSMU	CALCIUM SILICATE MASONRY UNIT	OF	OUTSIDE FACE
DET	DETAIL	OTS	OPEN TO STRUCTURE
DEG	DEGREE	PH	PENTHOUSE
DF	DRINKING FOUNTAIN	PL	PLATE
DIAG	DIAGONAL	PLBG	PLUMBING
DIA	DIAMETER	PT	PAINT
DIM	DIMENSION	P.T.	PRESSURE TREATED
DN	DOWN	PVC	POLYVINYL CHLORIDE
DWGS	DRAWINGS	RAD	RADIUS
EA	EACH	RD	ROOF DRAIN
EF	EACH FACE	REF	REFERENCE
EW	EACH WAY	RE:	REFER TO
EL	ELEVATION	REINF	REINFORCING
ELEV	ELEVATOR	REQ'D	REQUIRED
EQ	EQUAL	REV	REVISION
EQUIP	EQUIPMENT	RO	ROUGH OPENING
EWC	ELECTRIC WATER COOLER	Ø	ROUND OR DIAMETER
ETR	EXISTING TO REMAIN	SCHED	SCHEDULE
EXIST	EXISTING	SECT	SECTION
EFHC	EXISTING FIRE HOSE CABINET	SIM	SIMILAR
EJ	EXPANSION JOINT	SOG	SLAB ON GRADE
EOS	EMERGENCY OVERFLOW SCUPPER	SPECS	SPECIFICATIONS
E.O.S.	EDGE OF SLAB	SQ	SQUARE
E.O.D.	EDGE OF DECK	S.S.	STAINLESS STEEL
EXT	EXTERIOR	STD	STANDARD
FIN	FINISH	STL	STEEL
FE	FIRE EXTINGUISHER	STO	STORAGE
FEC	FIRE EXTINGUISHER CABINET	STRUC	STRUCTURAL
FHC	FIRE HOSE CABINET	SYM	SYMMETRICAL
FHEC	FIRE HOSE/EXTINGUISHER CABINET	THKNS	THICKNESS
FL	FLOOR	T.O.	TOP OF
FTG	FOOTING	TYP	TYPICAL
FD	FLOOR DRAIN	UNO	UNLESS NOTED OTHERWISE
FDN	FOUNDATION	VERT	VERTICAL
F.O.S.	FACE OF STUD	VIF	VERIFY IN FIELD
F.O.M.	FACE OF MASONRY	VTR	VENT THRU ROOF
GALV	GALVANIZED	WWF	WELDED WIRE FABRIC
GA	GAUGE OR GAGE	W/	WITH
GB	GYPSUM BOARD	W/O	WITHOUT
GYP. BD	GYPSUM BOARD	WP	WATERPROOFING
GIR	GIRDER	WS	WATER STOP
GRD BM	GRADE BEAM	WT	WEIGHT
GWB	GYPSUM WALL BOARD		

SYMBOLS



CONTACT LIST

BUILDING OWNER	AVENUE A PROPERTIES LLC
PROPERTY MANAGER	AVENUE A PROPERTIES LLC 325 ENTERPRISE DR BRECKENRIDGE, MI, 48615 SUITE 14 RYAN SMITH 989.708.6850
ARCHITECT OF RECORD	STREETSENSE. 3 BETHESDA METRO SUITE 140 BETHESDA, MARYLAND 20814 301.652.9020
DESIGN ARCHITECT / ENGINEER	CBRE HEERY, INC. 3550 LENOX ROAD NE SUITE 2300 ATLANTA, GEORGIA 30326 404.881.9880 LINDA KANOSKI 312.513.7612
CONTRACTOR	RYAN COMPANIES 700 OAKMONT LANE WESTMONT, IL, 60559 SUITE 100 630.328.1100 PATRICK MARTY 630.328.1135

GENERAL NOTES

1. THESE CONTRACT DOCUMENTS INDICATE CONSTRUCTION MATERIALS AND METHODS OF CONSTRUCTION IN ORDER TO ESTABLISH STANDARDS FOR QUALITY AND/OR PERFORMANCE. MATERIALS AND METHODS OTHER THAN THOSE INDICATED WITHIN THESE DOCUMENTS SHALL BE CONSIDERED FOR ACCEPTANCE BY THE ARCHITECT PROVIDED THAT THEY DO NOT AFFECT THE APPEARANCE FROM THAT INDICATED WITHIN THESE CONSTRUCTION DOCUMENTS IN ANY WAY WHATSOEVER.
2. THE ARCHITECT'S SEAL AFFIXED TO THESE CONTRACT DOCUMENTS SHALL CERTIFY TO THE BEST OF OUR KNOWLEDGE THAT THE DOCUMENTS COMPLY WITH LOCAL CODES, ORDINANCES AND ADA REGULATIONS. SHOULD THE CONTRACTOR FIND THAT ANY PORTION OF THE WORK HEREIN NOT COMPLY WITH LOCAL CODES AND ORDINANCES, THEY SHOULD NOTIFY THE ARCHITECT AS SOON AS POSSIBLE.
3. "TYPICAL" MEANS THE REFERENCED DETAIL SHALL APPLY FOR ALL SIMILAR CONDITIONS UNLESS NOTED OTHERWISE. "ALIGN" AS INDICATED ON THE DRAWINGS SHALL BE UNDERSTOOD TO MEAN ALIGN THE FINISH MATERIALS OF THE ELEMENTS INDICATED.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED BUILDING PERMITS.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL WORK AND MATERIALS IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES HAVING JURISDICTION.
6. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS INDICATED WITHIN THESE DOCUMENTS, AND SHALL NOTIFY THE ARCHITECT OF ANY VARIATION PRIOR TO THE PURCHASE OF MATERIALS, STARTING FABRICATION OR BEGINNING CONSTRUCTION.
7. THE CONTRACTOR, UPON AWARDING CONTRACTS TO SUBCONTRACTORS, SHALL SUBMIT TO THE ARCHITECT AND THE OWNER A LIST OF ANY LONG LEAD ITEMS ON THE PROJECT AND THEIR SCHEDULES. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ARCHITECT AND THE OWNER OF ANY ITEMS WHICH WILL IMPEDE THE COMPLETION OF THE PROJECT AS SCHEDULED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DELAY TO THE MOVE-IN DATE CAUSED BY SCHEDULING OF ITEMS WITHIN HIS SCOPE.
8. THE ARCHITECT HAS NOT, AND DOES NOT INTEND TO, CONDUCT ANY INVESTIGATION AS TO THE PRESENCE OF HAZARDOUS MATERIALS, INCLUDING ASBESTOS, WITHIN THE CONFINES OF THE PROJECT. THE ARCHITECT ACCEPTS NO RESPONSIBILITY FOR THE IDENTIFICATION, REMOVAL OR ANY EFFECTS FROM THE PRESENCE OF THESE MATERIALS. SHOULD ANY QUESTION ARISE, THE OWNER/ARCHITECT CONTRACT SHALL BE REFERRED TO IN REGARD TO HAZARDOUS MATERIALS.
9. RELOCATION OF ANY ITEMS INVOLVED IN THE CONTRACT WORK IS SUBJECT TO THE CONTRACTOR'S ABILITY TO DO SO WITHOUT PERMANENTLY DAMAGING OR MARRING THE ITEMS TO BE RELOCATED OR THE SURROUNDING AREAS. IF THE CONTRACTOR IS UNABLE TO RELOCATE ANY ITEMS DESCRIBED HEREIN, CONTRACTOR SHALL SUBSTITUTE NEW MATERIAL TO MATCH EXISTING IN LIEU OF RELOCATING EXISTING AT CONTRACTOR'S EXPENSE.
10. WHERE HVAC OR OTHER MECHANICAL, ELECTRICAL, AND PLUMBING ITEMS PENETRATE PARTITIONS, STUDS SHALL BE BRACED AND FRAMED TO STRUCTURE AS REQUIRED TO PROVIDE ADEQUATE SUPPORT. ALL PENETRATIONS THROUGH RATED WALLS SHALL BE SEALED TO ENSURE FIRE, SMOKE, AND / OR ACOUSTICAL RATINGS AT PENETRATIONS THROUGH MATERIAL.
11. THE EXTENT OF THE WORK SHALL BE LIMITED TO THE AREAS INDICATED ON THE CONSTRUCTION DOCUMENTS. NO ADDITIONAL WORK SHALL BE DONE OUTSIDE THE AREA OF CONSTRUCTION WITHOUT WRITTEN APPROVAL FROM THE OWNER. ANY ADDITIONAL WORK OUTSIDE THE AREA OF CONSTRUCTION SHALL BE AT THE CONTRACTOR'S EXPENSE.
12. LOCATIONS AND SIZE OF CEILING AND WALL ACCESS PANELS SHALL BE DETERMINED BY THE POSITION OF THE VALVES AND OTHER MECHANICAL AND ELECTRICAL ITEMS WHICH REQUIRE ACCESS. THE CONTRACTOR SHALL COORDINATE WITH ALL TRADES. THE ARCHITECT SHALL APPROVE ALL FINAL LOCATIONS OF ACCESS PANELS PRIOR TO INSTALLATION.
13. ALL VERTICAL AND HORIZONTAL JOINTS SHALL BE STAGGERED A MINIMUM OF 2'-0" ON OPPOSITE SIDES OF GWB PARTITIONS.
14. THE CONTRACTOR SHALL NOT DRILL INTO OR CORE THROUGH ANY BEAM OR JOIST, OR CUT THROUGH THE SLAB WITHOUT THE SPECIFIC WRITTEN APPROVAL OF THE OWNER, AND, AT THE OWNER'S REQUEST, THE STRUCTURAL ENGINEER.
15. ALL SUSPENDED EQUIPMENT AND PIPES SHALL BE HUNG BY HANGERS AND ATTACHED TO THE STRUCTURE U.N.O.
16. THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF ALL PARTS OF THE WORK SO THAT NO WORK SHALL BE LEFT IN AN UNFINISHED OR INCOMPLETE CONDITION OWING TO ANY DISAGREEMENT BETWEEN THE VARIOUS SUBCONTRACTORS OR THE SUBCONTRACTORS AND THE CONTRACTOR AS TO WHERE THE WORK OF ONE BEGINS AND ONE ENDS IN RELATION TO THE WORK OF THE OTHER.
17. THE CONTRACTOR SHALL REFER TO BUILDING OWNERS "CONTRACTOR RULES & REGULATIONS" PRIOR TO CONSTRUCTION FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
18. THE CONTRACTOR IS RESPONSIBLE FOR RUNNING INTERNET SPEED TESTS TO DETERMINE OPTIMAL LOCATION FOR CRADLEPOINT ANTENNA AND ROUTER. COORDINATE WITH TENANT'S IT DEPARTMENT.

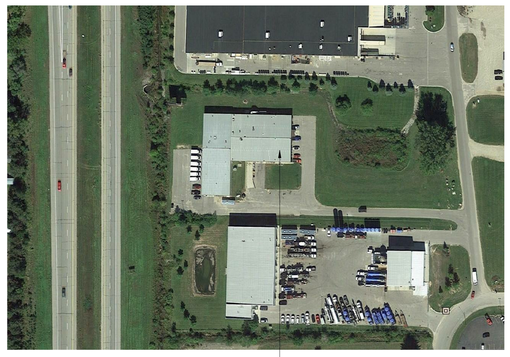
APPLICABLE CODES

THE CONTRACTOR SHALL CONFORM TO ALL CODES, ORDINANCES, ETC; WHICH HAVE JURISDICTION OVER THE WORK. THE CONTRACTOR SHALL RETAIN RESPONSIBILITY FOR COMPLIANCE WITH LATEST REVISIONS OF ALL OTHER APPLICABLE CODES AND ORDINANCES INCLUDING THE FOLLOWING:

ADOPTED CODES:

BUILDING	2015 MICHIGAN BUILDING CODE WITH IBC 2015 AMENDMENT
EXISTING BUILDING	2015 MICHIGAN REHABILITATION CODE ALTERATION – LEVEL 2
LIFE SAFETY	NFPA 101 LIFE SAFETY CODE, 2012 EDITION
ACCESSIBILITY DESIGN	2009 ICC/ANSI A117.1 ACCESSIBILITY STANDARDS
MECHANICAL	2015 MICHIGAN MECHANICAL CODE
ELECTRICAL	2020 NATIONAL ELECTRICAL CODE
ENERGY	2015 MICHIGAN ENERGY CONSERVATION CODE
FIRE	2012 INTERNATIONAL FIRE CODE W/APPENDICES
FUEL GAS	INTERNATIONAL FUEL GAS CODE, 2012 EDITION
PLUMBING	2015 MICHIGAN PLUMBING CODE

VICINITY MAP



EXISTING CONDITIONS - RENOVATION

1. WHERE EXISTING CONDITIONS ARE SHOWN, THEY HAVE BEEN DERIVED FROM AVAILABLE DRAWINGS ALONG WITH SITE/FIELD VISITS AND REPRESENT THE ARCHITECT'S/ENGINEER'S BEST ESTIMATE OF ACTUAL CONDITIONS. DEPICTED EXISTING CONDITIONS HAVE NOT BEEN EXTENSIVELY CORROBORATED BY FIELD INVESTIGATION.
2. ALL DIMENSIONS AND DETAILS OF EXISTING WORK INDICATED ON THE DRAWINGS SHALL BE FIELD MEASURED AND VERIFIED BY THE GENERAL CONTRACTOR BEFORE PROCEEDING. FIELD CHECKING SHALL BE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR. IMMEDIATELY REPORT ANY DISCREPANCIES TO THE ARCHITECT/ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
3. GENERAL CONTRACTOR IS CAUTIONED THAT THE WORK INVOLVES RENOVATION TO AN EXISTING FACILITY WHICH PART OR ALL OF MAY REMAIN IN OPERATION DURING CONSTRUCTION. IT IS MANDATORY THAT WORK WHICH IN ANY WAY AFFECTS THE NORMAL OPERATION OF THE FACILITY BE COORDINATED WITH THE OWNER.
4. ALL EXISTING RATED PARTITIONS AND PENETRATIONS SHALL BE VERIFIED BY THE GENERAL CONTRACTOR FOR COMPLIANCE WITH ALL APPLICABLE CODES, ORDINANCES AND STANDARDS AND SHALL REPAIR ANY NEW OR EXISTING DAMAGE OR BREACHES IN FIRE RATED PARTITIONS WITHIN THE AREA OF WORK.
5. GENERAL CONTRACTOR TO VERIFY ALL EXISTING FIRE, SMOKE, AND ACOUSTICALLY RATED PARTITIONS AND PENETRATIONS TO CONFIRM LOCATIONS ARE IN COMPLIANCE WITH CURRENT CODES AND ACOUSTICAL REQUIREMENTS. GENERAL CONTRACTOR TO NOTIFY ARCHITECT OF ANY DISCREPANCIES.

S.
streetsense.
3 BETHESDA METRO, SUITE 140
BETHESDA, MARYLAND 20814
(P) 301.652.9020 (F) 301.652.9166

© 2018 streetsense architecture, inc.

www.streetsense.com

CLIENT

XSA1 - MT. PLEASANT, MI (LARGE)
2266 NORTHWAY DRIVE
MOUNT PLEASANT, MI 48858

CONSULTANTS

CBRE
CBRE HEERY, INC.
3550 LENOX RD. SUITE 2300
ATLANTA, GA 30326
(P) 404.504.7900

wood.
ENVIRONMENT & INFRASTRUCTURE SOLUTIONS, INC.
1075 BIG SHANTY ROAD, NW, SUITE 100
KENNESAW, GA 30144
(P) 770.421.3400

PROFESSIONAL SEAL

PROFESSIONAL CERTIFICATION:
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL UNDER THE LAWS OF THE STATE OF MICHIGAN

LICENSE NO:1301055900 EXP:10/31/21

PROJECT STATUS	DATE
SITE PLAN REVIEW	04/26/21

REVISIONS

#	DESCRIPTION	DATE

KEY PLAN

SHEET TITLE
SHEET INDEX/GENERAL PROJECT INFORMATION

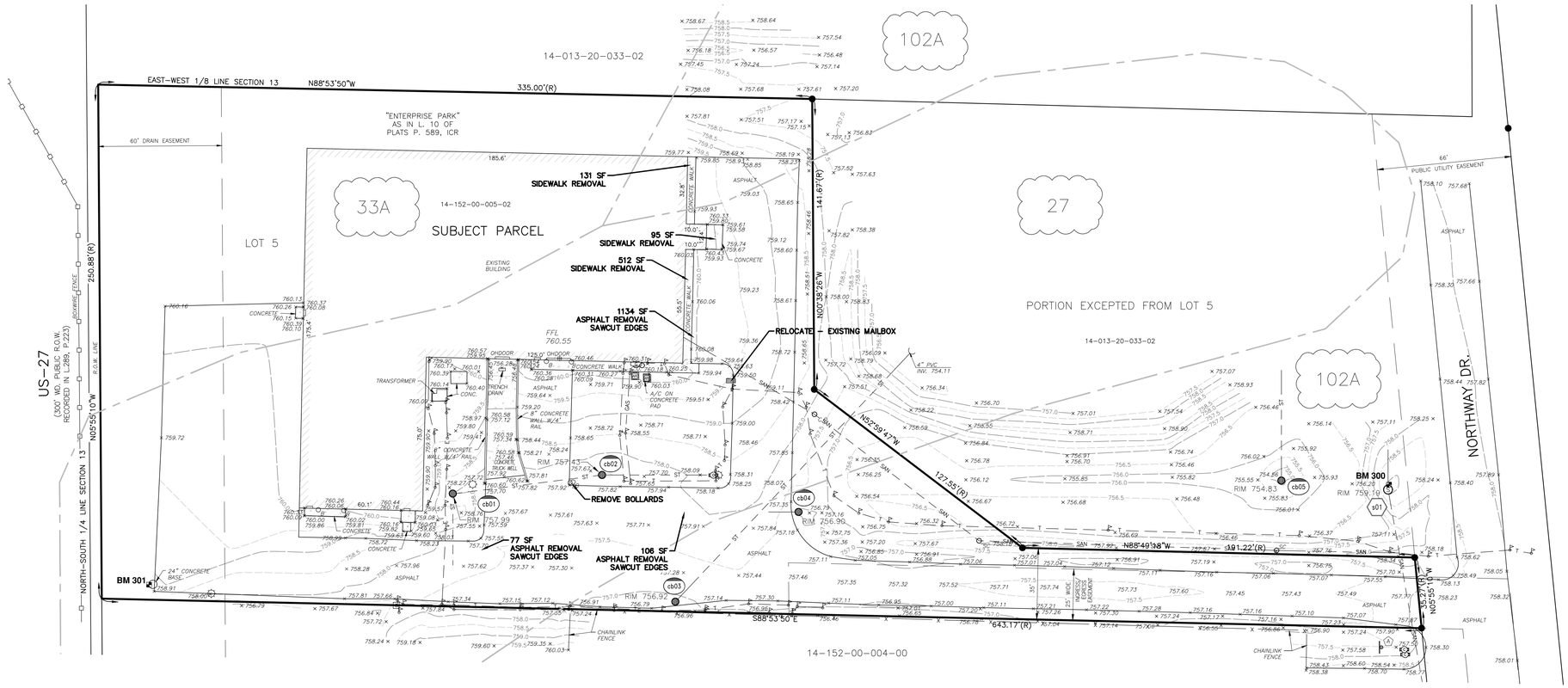
G-001

PROJECT NUMBER	2024200-05
MANAGED BY Checker	DRAWN BY Author
SCALE	As indicated

streetsense 2019 ©

4/26/2021 11:53:43 AM

EXISTING CONDITIONS & REMOVALS PLAN



NOTE:
BOUNDARY LINES ARE APPROXIMATE, BASED ON FIELD OBSERVATION OF OCCUPATION LINES. NO BOUNDARY SURVEY WAS PERFORMED.

LEGEND

- COMMUNICATION RISER
- COMMUNICATION BOX
- GAS METER
- END SECTION
- STORM CLEANOUT
- CATCH BASIN ROUND
- SANITARY CLEANOUT
- SANITARY MANHOLE
- AIR CONDITIONING UNIT
- SIGN
- LIGHT POLE
- BOLLARD
- MAILBOX
- UTILITY MARKING FLAG
- FINISHED FLOOR
- FOUND IRON ROD
- BENCHMARK
- —SAN— EXISTING SANITARY SEWER LINE
- — ST — EXISTING STORM SEWER LINE
- —GAS— EXISTING UNDERGROUND GAS LINE
- — T — EXISTING COMMUNICATION LINE
- — E — EXISTING UNDERGROUND ELECTRIC LINE

EXISTING SANITARY SEWER SCHEDULE				
STR #	TYPE	DIA	RIM ELEV	INVERT DATA
s01	MANHOLE (PRECAST)	4'	759.19	4" PIPE INV. 755.99 N. 6" PVC INV. 754.69 S.

EXISTING STORM SEWER SCHEDULE				
STR #	TYPE	DIA	RIM ELEV	INVERT DATA
cb01	CATCH BASIN (BLOCK)	2'	77.99	8" HDPE INV. 755.15 NE. 8" PVC INV. 755.68 S. T/WATER 755.33 BOTTOM 754.04
cb02	CATCH BASIN (PRECAST)	2'	757.43	8" HDPE INV. 755.77 SW. 8" HDPE INV. 755.77 E. BOTTOM 755.77 FILLED WITH DIRT
cb03	CATCH BASIN (PRECAST)	2'	756.92	6" PVC INV. 755.72 NE. T/WATER 755.72 BOTTOM 753.82
cb04	CATCH BASIN (BLOCK)	2'	756.90	6" PVC INV. 756.15 W. BOTTOM 755.45 FILLED WITH DIRT
cb05	CATCH BASIN (PRECAST)	2'	754.83	8" HDPE INV. 751.61 N. T/WATER 751.68 BOTTOM 750.63

BENCHMARKS

BENCHMARK #300
PK NAIL AND DISC IN N. EDGE OF SANITARY SEWER MANHOLE
ELEVATION= 758.89 (NAVD88)

BENCHMARK #301
PK NAIL AND DISC IN W. SIDE OF CONCRETE BASE
ELEVATION= 759.97 (NAVD88)

SIGN TABLE

(A) STOP

USDA–NRCS SOIL REPORT	
MAP UNIT SYMBOL	SOIL DESCRIPTION
27	CORUNNA SANDY LOAM
33A	THETFORD LOAMY SAND, 0 TO 3 PERCENT SLOPES
102A	SELFRIDGE LOAMY SAND, 0 TO 3 PERCENT SLOPES

STATE OF MICHIGAN
TIMOTHY J. ZIMMER
ENGINEER
No. 6201042709
LICENSED PROFESSIONAL ENGINEER

NOTE:
TOPOGRAPHIC SURVEY DONE BY LIVINGSTON ENGINEERING ON MARCH 22, 2021.

© 2021

LIVINGSTON ENGINEERING
CIVIL ENGINEERING SURVEYING PLANNING
3300 S. OLD US. 23, BRIGHTON, MI 48114
PHONE: (810) 225-7100 FAX: (810) 225-7699
http://www.livingstoneng.com

Client CBRE

XSA1 - MT. PLEASANT, MI (LARGE)
2266 NORTHWAY DR
MT PLEASANT, ISABELLA COUNTY, MICHIGAN
EXISTING CONDITIONS & REMOVALS PLAN

DATE	REVISIONS

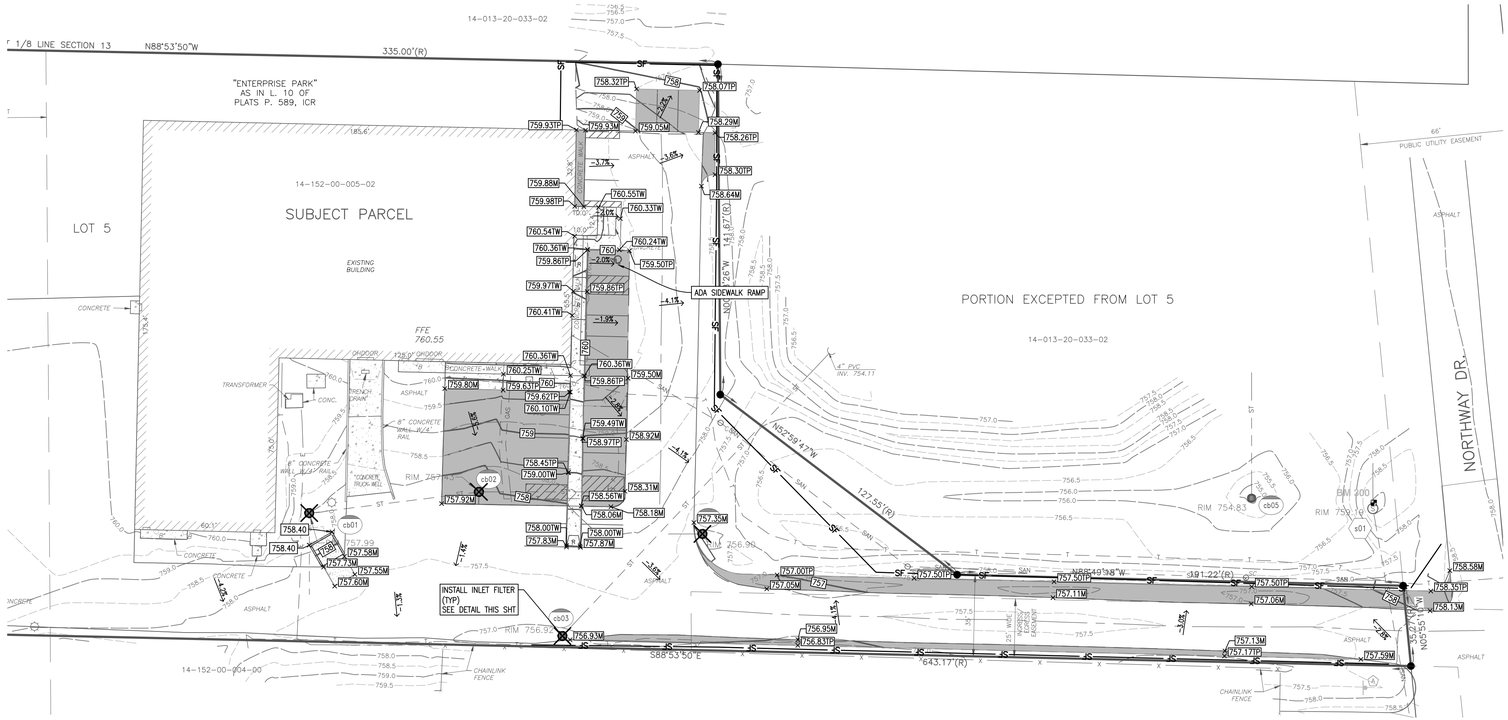
Drawn: JDM
Checked: DL
Approved: DL
Date: 04/23/2021

Job. no. 21139
Scale:
Vertical: 1" = 30' FEET
Horizontal:

C-100

FILE: C:\Users\user\Dropbox (Liveng)\Projects\2021\21139 CBRE 2266 Northway\03 DWGS\Ref Data(xref)\21139 Exist.& Removals.dwg

GRADING & SESC PLAN



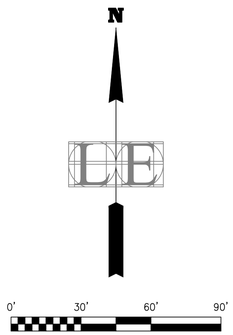
LEGEND

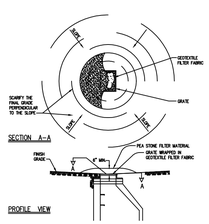
- PR. SPOT GRADE
- PR. CONTOUR
- DRAINAGE ARROW
- PR. SILT FENCE
- LIMITS OF GRADING
- LOW POINT INLET FILTER

SPOT GRADE ABBREVIATIONS LIST

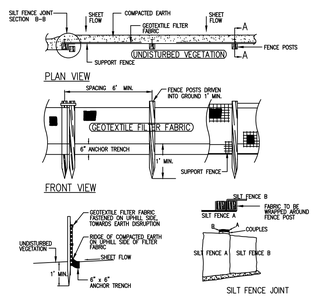
TP = TOP OF PAVEMENT
TW = TOP OF WALK
M = MATCH EXISTING

TOTAL DISTURBED AREA
11,432 S.F. (0.262 AC.)





LOW POINT INLET FILTER (SI-2)



36" SILT FENCE

PROPOSED CONSTRUCTION SCHEDULE FOR THE YEAR 2018

ACTIVITY	JUNE	JULY	AUG	SEP
CLEAR & GRUB	—			
GRADING		—		
PAVING		—	—	
SEED & MULCH			—	



© 2021

Soil Erosion Control
Temporary Controls And Sequence of Construction

1. NOTIFY THE ISABELLA COUNTY DRAIN COMMISSIONER'S OFFICE 24 HOURS PRIOR TO THE START OF GRADE WORK.
2. IN ACCORDANCE WITH PUBLIC ACT NO. 53, OF 1974, THE PERMIT HOLDER SHALL CALL MISS DIG FOR STAKING AND LOCATING OF UTILITIES, AT LEAST 72 HOURS IN ADVANCE OF THE START OF ANY WORK
3. (IMPORTANT NOTICE) DETENTION PONDS SHALL BE EXCAVATED, TOPSOILED, SEEDED, MULCHED AND TACKED PRIOR TO THE START OF MASSIVE EARTH DISRUPTION. INGRESS/EGRESS MUST HAVE LARGE CRUSHED ROCK TO REDUCE THE TRACKING OF SOIL ONTO THE PUBLIC TRAFFIC AREAS. SEE DETAIL ITEMS BELOW.
4. SILT FABRIC FENCE AS SHOWN ON PLANS SHALL BE PLACED ALONG PERIMETER ON ALL LOW LYING AREAS OF THE CONSTRUCTION SITE TO FILTER RUNOFF BEFORE LEAVING PROJECT SITE.
5. ALL TEMPORARY EROSION CONTROL DEVISES AS NOTED ON PLANS SHALL BE INSTALLED PRIOR TO START OF MASSIVE EARTH DISRUPTION.
6. PLAN DOES DENOTE A DETAILED EROSION CONTROL DEVICE TO RESTRICT TRACKING OF MATERIAL ONTO THE HIGHWAY. STONE DIAPERS SHALL BE INSTALLED AT ALL INGRESS/EGRESS AREAS OF THE SITE PRIOR TO THE START OF MASSIVE EARTH DISRUPTION. DIAPERS SHALL BE OF CRUSHED STONE AND SHALL HAVE A MINIMUM LENGTH OF 75 LINEAR FEET.
7. TOPSOIL OR SOIL STORAGE AREAS SHALL BE SEEDED AND MULCHED OR MATTED WITH STRAW, IMMEDIATELY AFTER THE STRIPPING PROCESS IS COMPLETED, TO PREVENT WIND AND WATER EROSION

DETENTION PONDS

8. DETENTION PONDS SHALL BE EXCAVATED, TOPSOILED, SEEDED, MULCHED AND TACKED PRIOR TO THE START OF MASSIVE EARTH DISRUPTION.
9. DETENTION POND OUTLETS SHALL BE OF THE STANDPIPE AND STONE FILTER SYSTEM, WITH TRASH SCREEN. OUTLET FLOW SHALL NOT EXCEED 0.20 CUBIC FEET OF WATER PER SECOND/PER ACRE. POND DIKES SHALL HAVE A MINIMUM OF ONE (1) FOOT OF FREEBOARD.
10. DIKES AND BERMS SHALL BE FREE OF ALL ORGANIC MATTER.
11. ALL UNIMPROVED DISTURBED AREAS SHALL BE STRIPPED OF TOPSOIL WHICH WILL BE STORED ONSITE FOR THE EXCAVATION STAGE. TOPSOIL PILES SHALL BE SEEDED AND MULCHED, OR MATTED WITH STRAW IN THE NON GROWING SEASON, IMMEDIATELY AFTER THE STRIPPING PROCESS IS COMPLETED, TO PREVENT WIND AND WATER EROSION.
12. SOIL EROSION CONTROLS SHALL BE MONITORED DAILY BY THE ON-SITE ENGINEER, OR CONTRACTOR, WHICHEVER CASE APPLIES.

SLOPES

13. SLOPES IN EXCESS OF 3 HORIZONTAL TO 1 VERTICAL SHALL NOT BE USED EXCEPT WITH A MECHANICAL DEVICE SUCH AS A RETAINING WALL, TERRACING, OR OTHER PRIOR APPROVED DEVICE. SLOPES STEEPER THAN 4 HORIZONTAL TO 1 VERTICAL SHALL HAVE STAKED MULCH BLANKETS OR SOD TO MINIMIZE THE CHANGE FOR EROSION.

STORM DRAINS

14. ALL STORM WATER STRUCTURES, CATCH BASINS AND/OR MANHOLES, IF BLOCK, SHALL BE PLASTERED ON BOTH THE INSIDE AND OUTSIDE OF THE STRUCTURES. GROUTING AND POINTING WILL BE NECESSARY AT THE CASTING AND STRUCTURE JOINT TO PREVENT LEAKAGE AND THE RESULTING SOIL MOVEMENT, AROUND THE STRUCTURE.
15. PAVEMENT ADJACENT TO STREET STORMWATER INLET STRUCTURES SHALL BE CUT OUT AFTER THE FIRST COAT OF PAVING, CONCRETE SHALL BE POURED AND A SECOND LAYER OF ASPHALT LAID OVER THE CONCRETE CUT, RINGS AND CASTINGS SHALL BE CENTERED AT THIS TIME, GROUTING AND POINTING SHALL ALSO BE DONE AT THIS TIME TO PREVENT LEAKAGE INTO THE STRUCTURES AND THE RESULTING SOIL MOVEMENT.
16. STORM WATER INLETS SHALL HAVE AS A TEMPORARY CONTROL A STRAW BALE BARRIER AND A STONE FILTER INSTALLED AROUND THE INLET DURING CONSTRUCTION. AS AN ALTERNATIVE TO THE STRAW BALE BARRIER, A BURLAP AND PEA STONE FILTER MAY BE USED. THREE LAYERS OF BURLAP FIBER AND A FILTER OF PEA STONE MINIMUM 1 FT. DEPTH CAN BE USED. DUE TO THE PORDOSITY OF THE BURLAP FILTER THE 1 FT OF STONE IS VERY IMPORTANT. THE CONTROL SHALL BE INSTALLED AS SOON AS THE STRUCTURE IS BUILT AND INSPECTED DAILY.
17. BURLAP AND PEA STONE FILTERS WILL NEED TO BE CHANGED AFTER EACH RAINFALL.
18. COUNTY CODE REQUIRES A MINIMUM PIPE SIZE OF 12" IN DIAMETER. IF SMALLER PIPE IS NEEDED FOR OUTLET PURPOSES THE 12"CAN BE BAFFLED TO THE CORRECT SIZE. ALL PIPE SHALL MEET THE 12" DIAMETER CODE SIZE.
19. ALL STORM DRAIN OUTLETS 15" IN DIAMETER OR LARGER SHALL HAVE ANIMAL GUARDS INSTALLED TO PREVENT ENTRANCE TO THE SYSTEM.
20. ALL STORM DRAINAGE PIPE 30" IN DIAMETER OR LARGER SHALL BE POINTED AT THE JOINTS ON THE INSIDE WITH MORTAR, AFTER BACKFILLING.
21. ALL STORM DRAIN OUTLETS THAT DO NOT EMPTY INTO THE DETENTION POND SHALL HAVE A TEMPORARY 5'x10'x3' SUMP INSTALLED AT THE TERMINATION OF THE STORM SEWER. UPON COMPLETION OF THE STABILIZATION WORK THE SUMP AREA SHALL BE FILLED AND RIP RAPPED WITH COBBLE STONE. SILT TRAPS SHALL BE INSPECTED AFTER EACH STORM.
22. ALL OUTLETS SHALL BE RIP RAPPED OVER KEYED FILTER FABRIC WITH A MINIMUM OF 15 SQ. YARDS OF 6" OR LARGER COBBLE STONE.
23. RIP RAP AS NOTED ON THE PLAN SHALL BE OF A FUNNEL SHAPE CONSTRUCTION, WIDTH SHALL INCREASE AS THE DISTANCE FROM THE OUTLET POINT INCREASES AT A 3:1 RATIO.
24. RIP RAP SHALL BE OF COBBLE STONE, 6" IN DIAMETER OR LARGER. GROUTING MAY BE NECESSARY, AND SHALL BE A MINIMUM OF 6"IN DEPTH WITH THE COBBLE SET IN THE CEMENT SLURRY.
25. IT WILL BE NECESSARY FOR THE DEVELOPER TO HAVE THE STORM DRAINAGE LINES CLEANED PRIOR TO FINAL INSPECTION BY THE LIVINGSTON COUNTY DRAIN COMMISSIONER'S OFFICE. IF REQUIRED, THIS WORK SHALL BE DONE BY A PROFESSIONAL SEWER CLEANING FIRM AND CERTIFIED IN WRITING BY THE PROJECT ENGINEER. ALL SUMPS AND TEMPORARY SILT TRAPS SHALL ALSO BE CLEANED AT THIS TIME.

STABILIZATION

26. ALL UNIMPROVED DISTURBED AREAS SHALL BE RE-TOPSOILED WITH A MINIMUM OF 3" OF MATERIAL, SEEDED, MULCHED AND TACKED WITHIN 15 DAYS OF THE COMPLETION OF THE MASSIVE EARTH DISRUPTION. IN THE NON-GROWING SEASON STRAW MATTING WILL SUFFICE. HYDROSEEDING WILL BE AN ACCEPTABLE ALTERNATE FOR MULCHING. EXTREME CARE SHOULD BE EXERCISED IN SPRING AND FALL PERIODS AS A FROST WILL BREAK THE BIND OF THE HYDROSEEDING, WHICH WILL AFFECT THE HYDROSEEDING, WHICH WILL AFFECT THE EFFECTIVENESS OF THIS PROCEDURE.
27. IN THE NON-GROWING SEASON, TEMPORARY STABILIZATION OF MASSIVELY EXPOSED AREAS FOR WINTER STABILIZATION SHALL BE DONE WITH STRAW MATTING.
28. PERMIT FEES DURING THE WINTER PERIOD OF NON-CONSTRUCTION (DECEMBER 1 THROUGH MARCH 31) SHALL NOT BE IMPOSED IF THE PERMIT HOLDER TEMPORARILY STABILIZES THE EXPOSED AREAS WITH STRAW MATTING AND OTHER APPROVED CONTROLS, AND OBTAINS A WINTER STABILIZING CERTIFICATE FROM THIS OFFICE.
29. PERIODIC INSPECTIONS WILL BE MADE THROUGHOUT THE COURSE OF THE PROJECT. IT WILL BE THE RESPONSIBILITY OF THE MANAGERS OF THE PROJECT TO CONTACT THIS OFFICE FOR THE FINAL INSPECTION AT THE END OF THE PROJECT.
30. THIS COMMERCIAL PERMIT IS VALID FOR THE MASS EARTH MOVEMENT, THE INSTALLATION OF ROADS, DRAINS, AND UTILITIES, AND IS NOT FOR ANY SINGLE FAMILY RESIDENCE. ALL RESIDENTIAL BUILDERS WILL NEED TO SECURE WAIVERS AND/OR PERMITS AS NECESSARY FOR EACH LOT IN THIS DEVELOPMENT AT THE TIME APPLICATION FOR SINGLE FAMILY RESIDENCE IS MADE. IS MADE.
31. THE ISSUING BUILDING DEPARTMENT SHALL NOT ISSUE THE CERTIFICATE OF OCCUPANCY UNTIL THE FINAL LETTER FROM THE LIVINGSTON COUNTY DRAIN COMMISSIONER'S OFFICE HAS BEEN RECEIVED.

SEQUENCE OF CONSTRUCTION:

1. INSTALL EROSION AND SEDIMENT CONTROL MEASURES PER PLAN.
2. PERFORM SITE DEMOLITION REQUIRED.
3. INSTALL STORM DRAINAGE SYSTEM INCLUDING DETENTION BASINS; INSTALL INLET FILTERS.
4. ROUGH GRADE SITE & STORE SOIL.
5. MAINTAIN EROSION AND SEDIMENT CONTROL MEASURES, AS REQUIRED.
6. BRING PAVEMENT AREAS TO SUB-BASE; PLACE SUB-BASE; REMOVE PARKING LOT INLET FILTER AND PLACE ASPHALT PAVEMENT.
7. FINISH GRADE, REDISTRIBUTE TOPSOIL, SEED & MULCH ALL DISTURBED AREAS.
8. REMOVE ALL EROSION & SEDIMENT CONTROL MEASURES;SEED AND MULCH ALL REMAINING UNSTABILIZED AREAS.

SEEDING, FERTILIZER AND MULCH BARE GROUND RATIO:

- TOP-SOIL 3" IN DEPTH
- GRASS SEED 210 LBS./AC.
- FERTILIZER 150 LBS./AC.
- STRAW MULCH 3" IN DEPTH, 1.5 TO 2 TONS / AC. (ALL MULCHING MUST HAVE A TIE DOWN – ASPHALT TACKIFIER, NET BINDING, ETC.)
- HYDROSEEDING IS NOT ACCEPTABLE FOR SLOPES EXCEEDING 1%, IN SUCH CASES STABILIZATION SHALL BE DONE WITH SEED AND STRAW MULCH WITH A TACKIFIER.

MAINTENANCE SCHEDULE FOR SOIL EROSION CONTROLS

1. SILT FENCE SHALL BE INSPECTED WEEKLY AND AFTER EACH MAJOR STORM EVENT. MAINTENANCE SHALL INCLUDE REMOVAL OF ACCUMULATED SILT AND REPLACEMENT OF TORN SECTIONS. SILT FENCE SHALL BE REMOVED WHEN ALL CONTRIBUTING AREAS HAVE BEEN STABILIZED.
2. TRACKING PAD SHALL BE INSPECTED MONTHLY FOR ACCUMULATED DIRT. TRACKING PAD SHALL BE REPLACED WHEN THE STONES ARE CHOCKED WITH DIRT. TRACKING PAD SHALL BE REMOVED IMMEDIATELY PRIOR TO THE FIRST COURSE OF ASPHALT BEING LAID.
3. DETENTION POND SHALL BE INSPECTED QUARTERLY ON A PERMANENT BASIS. MAINTENANCE SHALL INCLUDE SEDIMENT REMOVAL, EMBANKMENT STABILIZATION AND MAINTAINING THE OUTLET STRUCTURE IN GOOD CONDITION. NO TREES SHALL BE ALLOWED TO GROW ON THE EMBANKMENT.
4. CATCH BASINS SHALL BE INSPECTED ANNUALLY FOR ACCUMULATION OF SEDIMENT. ALL SEDIMENT MUST BE REMOVED AND DISPOSED OF PROPERLY WHEN THE SUMP IS FULL.
5. COMMON AREAS SHALL BE STABILIZED NO LATER THAN 15 DAYS AFTER GRADE WORK, PURSUANT TO RULE 1709 (5).

LIVINGSTON ENGINEERING
CIVIL ENGINEERING SURVEYING PLANNING
3300 S. OLD U.S. 23, BRIGHTON, MI 48114
PHONE: (810) 225-7100 FAX: (810) 225-7699
http://www.livingstoneng.com

Client
CBRE

XSA1 - MT. PLEASANT, MI (LARGE)
2266 NORTHWAY DR
MT PLEASANT, ISABELLA COUNTY, MICHIGAN
GRADING AND SESC PLAN

DATE	REVISIONS

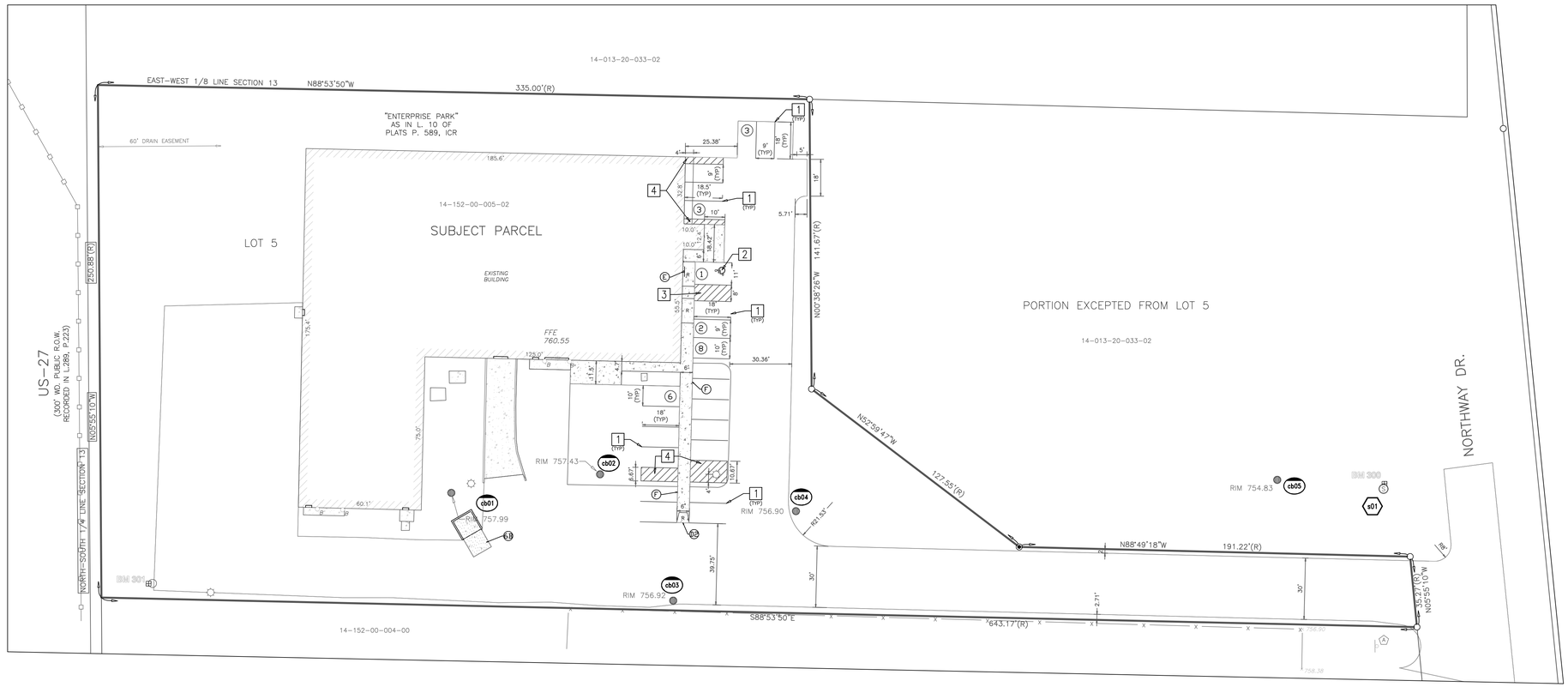
Drawn: JDM
Checked: DL
Approved: DL
Date: 04/23/2021

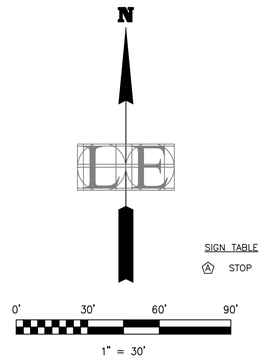
Job. no. 21139
Scale: Vertical: 1" = 30' FEET Horizontal:

C-101

FILE:C:\Users\user\Dropbox (Liveng)\Projects\2021\21139 CBRE 2266 Northway\03 DWGS\Ref Data\xref\21139 Grading & SESC.dwg

SITE IMPROVEMENT PLAN





STATE OF MICHIGAN
TIMOTHY J. ZIMMER
ENGINEER
No. 6201042709
LICENSED PROFESSIONAL ENGINEER

LEGEND

- STORM CLEANOUT
- CATCH BASIN ROUND
- AIR CONDITIONING UNIT
- SIGN
- LIGHT POLE

KEYED PAVEMENT MARKING NOTES:

1. 4" SINGLE SOLID LINE, WHITE
2. PAINTED INTERNATIONAL SYMBOL OF ACCESSIBILITY, BLUE ADA COMPLIANT
3. 4" SINGLE SOLID LINES, BLUE, 45° CROSS HATCH PATTERN (2' O.C.) WITH BORDER, ADA COMPLIANT
4. 4" SINGLE SOLID LINES, WHITE, 45° CROSS HATCH PATTERN (2' O.C.) WITH BORDER,

KEYED NOTES:

- (D2) SIDEWALK RAMP – MDOT TYPE R, SEE DETAIL D2 ON SHEET C-103
- (E) BARRIER FREE SIGN WITH R7-8, SEE DETAIL E ON SHEET C-103
- (F) CURB FACE WALK AT PROPOSED PAVEMENT, SEE DETAIL F ON SHEET C-103
- (6B) DUMPSTER SCREENING, SEE DETAIL 6B ON SHEET C-103

GENERAL NOTES:

1. NO HAZARDOUS SUBSTANCES ARE TO BE STORED, USED, OR GENERATED ON-SITE.
2. ALL UTILITY COMPANIES SHALL BE CONTACTED PRIOR TO CONSTRUCTION AND ALL UTILITIES LOCATED. ANY DISCREPANCIES OR CONFLICTS SHALL BE REPORTED TO ENGINEER FOR RESOLUTION PRIOR TO COMMENCING CONSTRUCTION.
3. ALL SIDEWALK RAMPS TO MEET CURRENT ADA GUIDELINES AND SPECIFICATIONS.
4. UNDERGROUND ELECTRIC CONNECTION WILL BE PROVIDED AS DETERMINED BY UTILITY COMPANY.
5. ALL STORM SEWER, WATER MAIN AND SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH ISABELLA COUNTY STANDARDS AND SPECIFICATIONS.

PROPOSED PAVEMENT LEGEND:

BITUMINOUS ASPHALT PAVEMENT

CONCRETE PAVEMENT / SIDEWALKS

© 2021

LIVINGSTON ENGINEERING
CIVIL ENGINEERING PLANNING SURVEYING
3300 S. OLD US. 23, BRIGHTON, MI 48114
PHONE: (810) 225-7100 FAX: (810) 225-7699
http://www.livingstoneng.com

Client CBRE

XSA1 - MT. PLEASANT, MI (LARGE)
2266 NORTHWAY DR
MT. PLEASANT, ISABELLA COUNTY, MICHIGAN
SITE IMPROVEMENT PLAN

REVISIONS	DATE

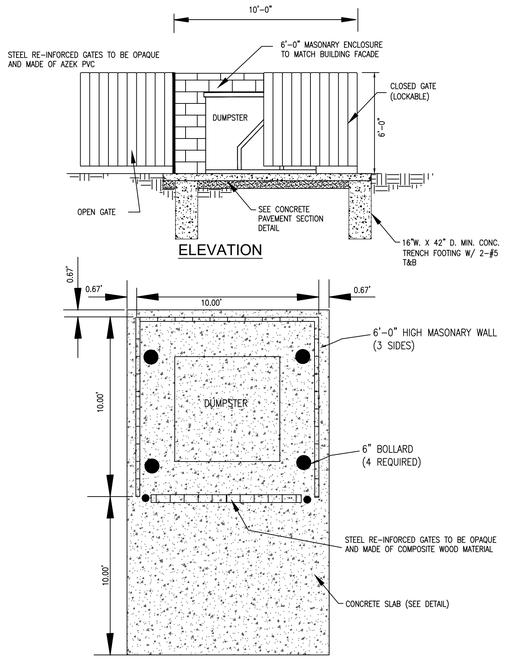
Drawn: JDM
Checked: DL
Approved: DL
Date: 04/23/2021

Job. no. 21139
Scale: Vertical: Horizontal: 1" = 30' FEET

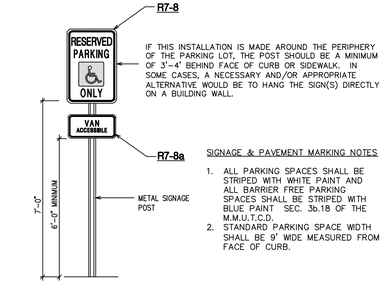
C-102

FILE:C:\Users\user\Dropbox (Living)\Projects\2021\21139 CBRE 2266 Northway\03 DWGS\Ref Data(xref)\21139 Site Layout.dwg

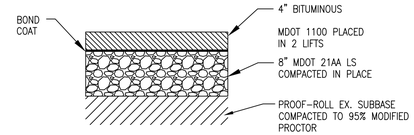
DETAIL



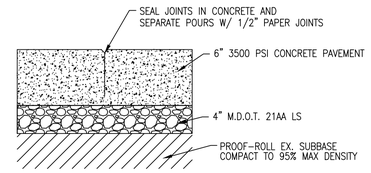
6B DUMPSTER SCREENING DETAIL
NOT TO SCALE



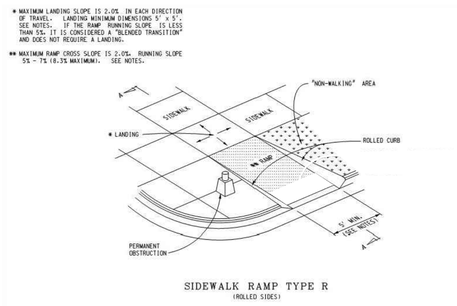
E BARRIER FREE SIGN
NOT TO SCALE



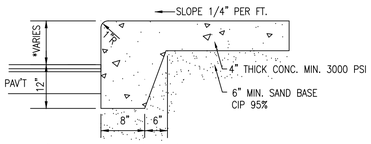
A ASPHALT PAVEMENT SECTION
NOT TO SCALE



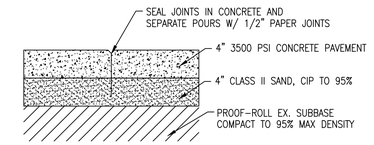
B CONCRETE PAVEMENT SECTION
** FOR USE IN DUMPSTER PAD **
NOT TO SCALE



D2 SIDEWALK RAMP - MDOT TYPE R
NOT TO SCALE



F CURB FACE WALK
NOT TO SCALE



C CONCRETE SIDEWALK SECTION
** FOR USE IN SIDEWALK AREAS THAT DO NOT ABUT PAVEMENT**
NOT TO SCALE

STATE OF MICHIGAN
TIMOTHY J. ZIMMER
ENGINEER
No. 6201042709
LICENSED PROFESSIONAL ENGINEER

© 2021

LIVINGSTON ENGINEERING
CIVIL ENGINEERING SURVEYING PLANNING
3300 S. OLD U.S. 23, BRIGHTON, MI 48114
PHONE: (810) 225-7100 FAX: (810) 225-7699
http://www.livingstoneng.com

Client CBRE

XSA1 - MT. PLEASANT, MI (LARGE)
2266 NORTHWAY DR
MT PLEASANT, ISABELLA COUNTY, MICHIGAN
DETAIL

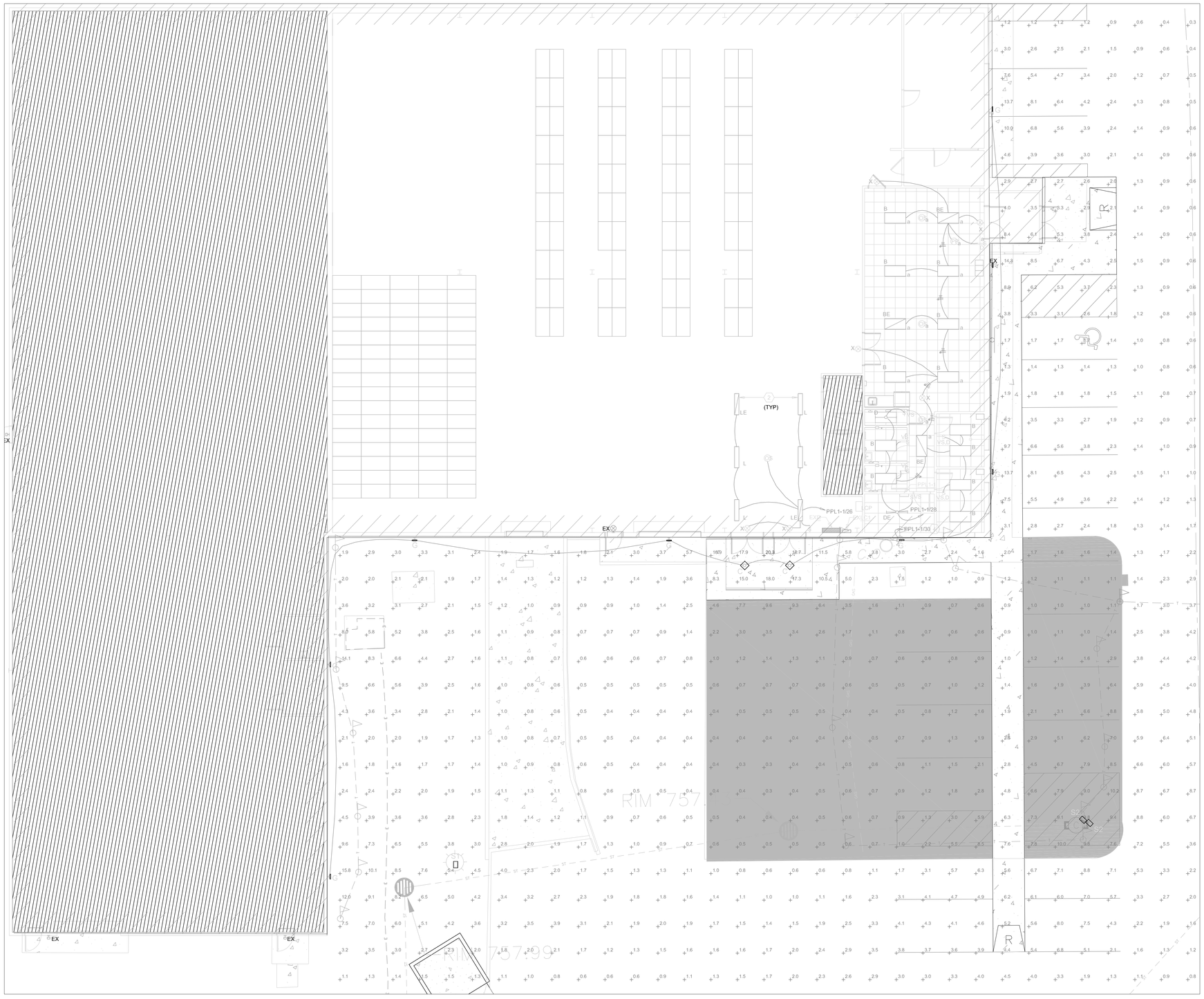
REVISIONS	DATE

Drawn: JDM
Checked: DL
Approved: DL
Date: 04/23/2021

Job. no 21139
Scale:
Vertical:
Horizontal:

C-103

FILE:C:\Users\user\Dropbox (Liveng)\Projects\2021\21139 CBRE 2266 Northway\03 DWGS\Ref Data\(xref)\21139 Detail.dwg



1 EXTERIOR LIGHTING PHOTOMETRIC PLAN
1/8" = 1'-0"

Statistics					
Description	Symbol	Avg	Max	Min	Avg/Min
Calc Zone #1	+	2.7 fc	20.3 fc	0.1 fc	27.0:1

streetsense.

3 BETHESDA METRO, SUITE 140
BETHESDA, MARYLAND 20814
(P) 301.652.9020 (F) 301.652.9166

© 2018 streetsense architecture, inc.

www.streetsense.com

XSA1 - MT. PLEASANT, MI (LARGE)

2266 NORTHWAY DRIVE
MOUNT PLEASANT, MI 48858

CONSULTANTS

CBRE

CBRE HEERY, INC.
3550 LENOX RD, SUITE 2300
ATLANTA, GA 30326
(P) 404.504.7900

PROFESSIONAL SEAL

PROFESSIONAL CERTIFICATION:
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL UNDER THE LAWS OF THE STATE OF MICHIGAN

STATE OF MICHIGAN
MATTHEW JAMES DANOWSKI
ENGINEER
No. 6201068051
PROFESSIONAL ENGINEER

PROJECT STATUS	DATE
SITE PLAN REVIEW	04 26 2021

REVISIONS

#	DESCRIPTION	DATE

0 4' 8' 16'
SCALE: 1/8" = 1'-0"

N

KEY PLAN

SHEET TITLE

EXTERIOR LIGHTING PHOTOMETRIC PLAN

E-202

PROJECT NUMBER	2024200-07
MANAGED BY PK	DRAWN BY RF
SCALE	As indicated

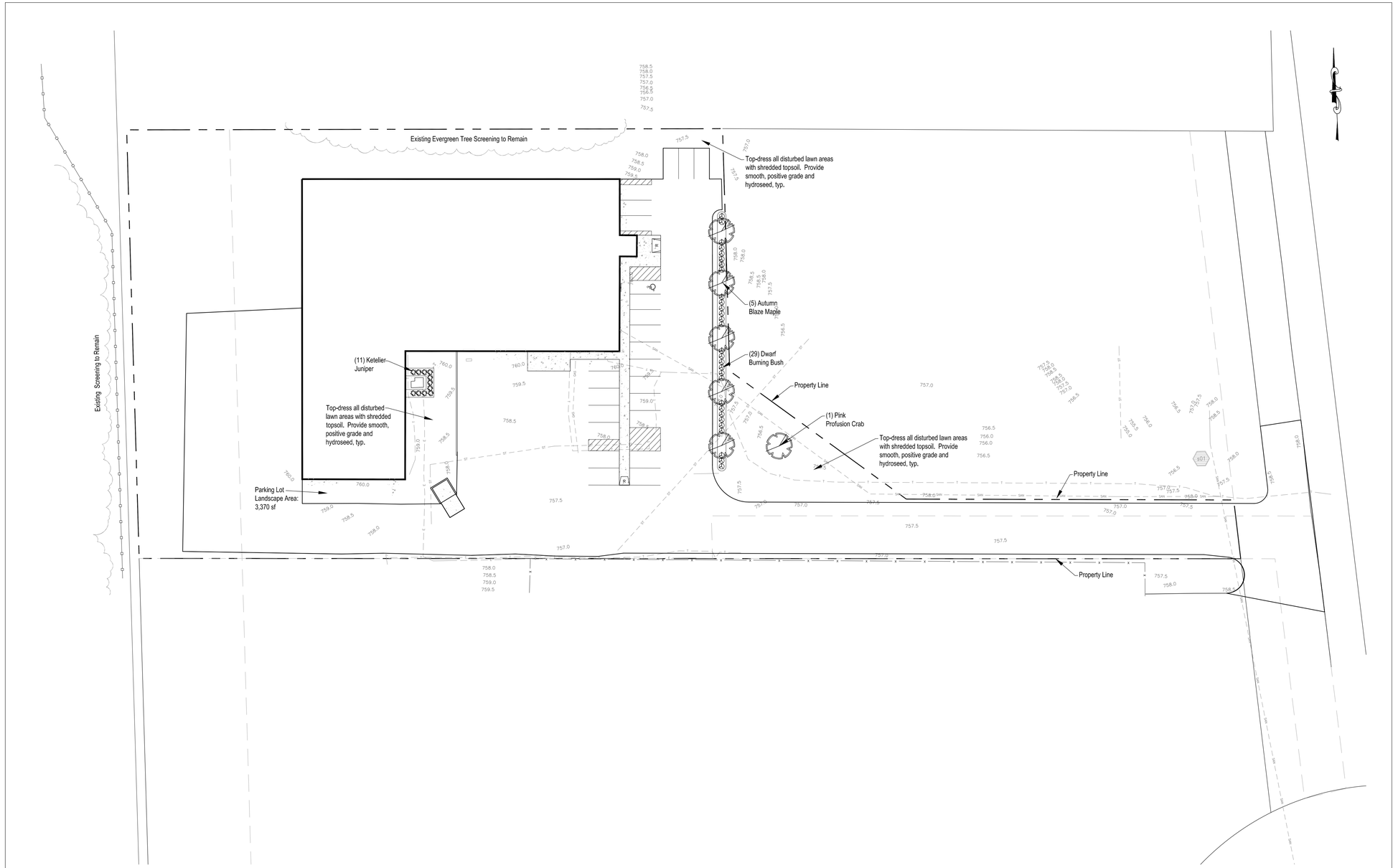
streetsense 2019 ©

PLANTING NOTES:

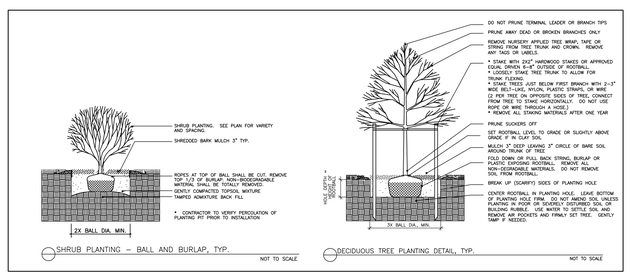
1. Contractor shall be responsible for contacting and coordinating with all pertinent utility companies 72 hours in advance of any digging to make themselves familiar with all underground utilities, pipes and structures. Contractor shall take sole responsibility for any cost incurred due to damage of said utilities or structures.
2. Contractor shall not willfully proceed with construction as designed when it is obvious that unknown obstructions and/or grade differences exist. Such conditions shall immediately be brought to the attention of the Owner's Representative. The contractor shall assume full responsibility for all necessary revisions due to failure to give such notification.
3. Any discrepancies between dimensioned layout and actual field conditions shall be reported to the Owner's Representative. Failure to make such discrepancies known will result in contractor's responsibility and liability for any changes and associated costs.
4. Contractor shall be responsible for any coordination with subcontractors as required to accomplish construction installation operations.
5. Contractor shall provide and maintain positive surface drainage.
6. Contractor shall be responsible for any existing materials that are damaged during construction.
7. See Plant Data Chart and Planting Details for planting requirements, materials and execution.
8. All trees shall have a clay loam or clay root ball. Trees with sand root balls will not be accepted.
9. All tree varieties and substitutions to be approved by he Owners Representative prior to being delivered to site. Any plant material delivered to site not previously approved may be rejected and are the sole responsibility of the contractor.
10. The location of all plant material shall be scaled from drawings or interpreted from plant list. Final location of all plant material shall be subject to approval from the Owner's Representative.
11. The contractor shall "water in" and fertilize all plants immediately after planting.
12. Contractor shall install 2 - 4" of screened Top Soil on all planting areas and all repaired lawn areas. Contractor shall install Hydro-Seed at all lawn repair areas as required.
13. Contractor shall install 3" depth Shredded Hardwood Mulch in all shrub and tree planting beds unless otherwise indicated.
14. The contractor shall guarantee all trees, shrubs, ground cover and other plant materials for one year from the date of acceptance, including labor and removal and disposal of dead material. Project owner shall be responsible maintenance program.
15. All plant material shall be nursery grown. All trees and plant material shall meet the current standards of the American Society of Nurseryman.
16. All diseased, damaged, or dead material shown on the site plan shall be replaced by the end of the following growing season. Property owner shall be responsible to maintain plant material in healthy condition and/or replace dead plant material for the life of the project.
17. Contractor shall adhere to all soil erosion prevention methods as directed within civil engineering drawings and within the municipal Ordinance including maintaining silt fencing and ensuring that soil, silt and other debris is prevented from leaving site or entering area drains, sewer inlets, creeks or natural areas.

LANDSCAPE PLANTING PLAN

Scale: 1" = 30'



PLANTING DETAILS:



PLANT DATA CHART:

QTY.	DESCRIPTION	SIZE / ROOT
5	Acer x freemanii 'Autumn Blaze' Autumn Blaze Red Maple	3" cal., B&B
1	Malus 'Pink Profusion' Pink Profusion Crab	2.5" cal., B&B
29	Euonymus alatus 'Compactus' Dwarf Burning Bush	30-36", B&B
12	Juniperus chinensis 'Keteleeri' Keteleir Juniper	4-5', B&B

3 WORKING DAYS
BEFORE YOU DIG
CALL MISS DIG
1-800-482-7171
FOR THE LOCATION OF UNDERGROUND FACILITIES

UNION TOWNSHIP LANDSCAPE REQUIREMENTS:

Landscape Adjacent to Roads:

- Parcel Road Frontage: 34.27'
- Drive width at Road Frontage: 31.20'
- Planting area at Road Frontage: 3.07'
- Not feasible to provide or plant landscape adjacent to frontage road and entrance drive because of limited width and conflict with Visibility Clearance Zone sight distances.

Berms in Front Yard:

- Available planting area between property line and parking area: 10'-9"
- Not feasible to establish a 3' berm within the narrow area between the parking lot and property line. See landscape plantings provided to establish screening from parking lot.

Greenbelts: Not Required

Landscape Screening:

- Subject property is not adjacent to residentially zoned or used property therefore additional screening is not required.
- Existing screening exists and will remain at northern and western property lines.
- Evergreen shrubs are proposed to screen existing transformer adjacent to building.

Parking Lot Lanscaping:

Required:
30 sf landscape area / parking space
23 parking spaces x 30 sf = 690 sf
Required: 690 sf
Provided: 3,370 sf

Required:
1 Tree / 5 parking spaces
23 parking spaces / 5 = 4.6 = 5
Required: 5 Trees
Provided: 5 Trees

STATE OF MICHIGAN
JAMES T. EPPINK
LANDSCAPE ARCHITECT
No. 3309
REGISTERED
LANDSCAPE ARCHITECT

J EPPINK PARTNERS, INC.
Urban Design Studio
Landscape Architecture
Traditional Town Planning
9336 Sashabaw Road
Clarkston, Michigan 48348
248.922.0789

The ideas and design concepts expressed herein and the graphically displayed arrangement of their components represented by this drawing have been developed for the exclusive use of the specified project and are the sole property of J EPPINK PARTNERS, INC. Any conveyance or disclosure of the ideas or design concepts or use of any graphically displayed arrangements of their components shall be at the discretion of and only through the expressed written consent of J EPPINK PARTNERS, INC
© 2021 J EPPINK PARTNERS, INC

Project:
2266 Northway Drive
2266 Northway Drive
Mount Pleasant, Michigan

Client:
CBRE

Sheet:
Landscape Planting Plan:

Issues / Revisions

Drawn by: JTE
Checked By
Date: April 23, 2021
Scale: As Shown
Sheet: LP-1

Draft Motions: PSPR 21-11 2266 Northway Drive Combined Preliminary - Final Site Plan Review Application

MOTION TO APPROVE THE COMBINED PRELIMINARY – FINAL SITE PLAN AS PRESENTED:

Motion by _____, supported by _____, to approve the PSPR 21-11 combined preliminary and final site plan for improvements to an existing industrial building and site to accommodate a new package distribution facility at 2266 Northway Drive on parcel number 14-152-00-005-02, located on approximately 1.92 acres on the west side of Northway Drive in the northeast quarter of Section 13 and in the I-2 (General Industrial) zoning district, finding that the April 26, 2021 site plan fully complies with the applicable Zoning Ordinance requirements for preliminary and final site plan approval, including Sections 14.2.P. (Required Site Plan Information) and 14.2.S. (Standards for Site Plan Approval).

MOTION TO APPROVE THE COMBINED PRELIMINARY – FINAL SITE PLAN WITH CONDITIONS:

Motion by _____, supported by _____, to approve the PSPR 21-11 combined preliminary and final site plan for improvements to an existing industrial building and site to accommodate a new package distribution facility at 2266 Northway Drive on parcel number 14-152-00-005-02, located on approximately 1.92 acres on the west side of Northway Drive in the northeast quarter of Section 13 and in the I-2 (General Industrial) zoning district, finding that the April 26, 2021 site plan can comply with applicable Zoning Ordinance requirements for preliminary and final site plan approval, including Sections 14.2.P. (Required Site Plan Information) and 14.2.S. (Standards for Site Plan Approval), subject to the following condition(s):

1. Add the missing items of required information per Section 14.2.P. to a revised site plan.
2. Correct and update the sidewalk, exterior lighting, parking, and landscaping details on a revised site plan to conform to Zoning Ordinance requirements.
3. Confirmation by the Zoning Administrator that all required documentation of permits or approvals have been received from the Mt. Pleasant Fire Department, the Isabella County Transportation Commission, the Isabella County Road Commission for the expanded driveway approach, the Isabella County Drain Commissioner's Office for stormwater management approval, and the Township's Public Services Department for water and sanitary sewer documentation, prior to issuance of a building permit.
4. Submittal of a revised final site plan for administrative review and acceptance by the Zoning Administrator, prior to issuance of a building permit.

_____

MOTION TO POSTPONE ACTION:

Motion by _____, supported by _____, to postpone action on the PSPR 21-11 combined preliminary and final site plan for improvements to an existing industrial building and site to accommodate a new package distribution facility at 2266 Northway Drive until _____ _____, 2021 for the following reasons: _____

_____

Draft Motions: PSPR 21-11 2266 Northway Drive Combined Preliminary - Final Site Plan Review Application

MOTION TO APPROVE ONLY THE PRELIMINARY SITE PLAN WITH CONDITIONS:

Motion by _____, supported by _____, to approve only the PSPR 21-11 preliminary site plan for improvements to an existing industrial building and site to accommodate a new package distribution facility at 2266 Northway Drive on parcel number 14-152-00-005-02, located on approximately 1.92 acres on the west side of Northway Drive in the northeast quarter of Section 13 and in the I-2 (General Industrial) zoning district, finding that the April 26, 2021 site plan can comply with applicable Zoning Ordinance requirements for preliminary site plan approval, including Sections 14.2.P. (Required Site Plan Information) and 14.2.S. (Standards for Site Plan Approval), subject to the following condition(s):

1. Add the missing items of required information per Section 14.2.P. to a revised final site plan.
2. Correct and update the sidewalk, exterior lighting, parking, and landscaping details on a revised final site plan to conform to Zoning Ordinance requirements.
3. Complete the plan submission and review process for each relevant outside agency.
4. Submittal of an updated final site plan for Planning Commission review and approval.

_____

_____

_____

_____

_____

MOTION TO DENY:

Motion by _____, supported by _____, to deny the PSPR 21-11 combined preliminary and final site plan for improvements to an existing industrial building and site to accommodate a new package distribution facility at 2266 Northway Drive on parcel number 14-152-00-005-02, located on approximately 1.92 acres on the west side of Northway Drive in the northeast quarter of Section 13 and in the I-2 (General Industrial) zoning district, finding that the April 26, 2021 site plan does not comply with applicable Zoning Ordinance requirements, including Sections 14.2.P. (Required Site Plan Information) and 14.2.S. (Standards for Site Plan Approval), for the following reasons:

_____

_____

_____

_____

_____

_____

_____