AGENDA
Cascade Charter Township Planning Commission
Monday, April 17, 2023
7:00 pm
2870 Jacksmith Ave

Public may access the meeting via video conference software Zoom
https://us02web.zoom.us/j/85807187174

Meeting ID: 879 8058 1366
By Phone: +1 929 205 6099

ARTICLE 1. **Call the meeting to order**
Record the attendance

ARTICLE 2. **Pledge of Allegiance to the Flag**

ARTICLE 3. **Approve the current Agenda**

ARTICLE 4. **Disclose any Conflict of Interest**

ARTICLE 5. **Approve the Minutes of the March 20, 2023 Meeting**

ARTICLE 6. **Acknowledge visitors and those wishing to speak.**
(Comments are limited to five minutes per speaker)

ARTICLE 7. **Case #22-3739/Northpointe Bank**
Property Address: 5303 28th St Ct
Public Hearing
Requested Action: Preliminary Plan Review for an amendment to the PUD Ordinance to accommodate an addition to the existing office building.

ARTICLE 8. **Case #23-3756/Fleet Quest Logistics, LLC**
Property Address: 5610 & 5620 Kraft Ave
Public Hearing
Requested Action: Type II Special Use Permit to allow a trucking terminal.

ARTICLE 9. **Case #23-3758/Scott Geerlings**
Property Address: 5784 Kraft Ave
Requested Action: Site Plan Review for an addition to an existing parking lot.

ARTICLE 10. **Old Business**

ARTICLE 11. **Any Other Business**

ARTICLE 12. **Acknowledge visitors and those wishing to speak.**
(Comments are limited to five minutes per speaker)

ARTICLE 13. **Adjournment**

Meeting format

1. ***Staff Presentation*** *Staff report and recommendation*
2. ***Project presentation-*** *Applicant presentation and explanation of project*
   a. ***PUBLIC HEARINGS***
      i. *Open Public Hearing. Comments are limited to five minutes per speaker; exception may be granted by the chair for representative speakers and applicants*

ii. Close public hearing

3. ***Commission discussion*** *– May ask for clarification from applicant, staff or public*
4. ***Commission decision - Options***
    - *a. Table the decision*
    - *b. Deny*
    - *c. Approve*
    - *d. Approve with conditions*
    - *e. Recommendation to Township Board*

Minutes
Cascade Charter Township
Planning Commission
Monday, March 20, 2023
7:00 PM
2870 Jacksmith Ave SE

ARTICLE 1. Chair Noordyke called the meeting to order at 7:00 PM.
Members Present: Noordhoek, Rissi, Moxley, Noordyke, Richardson, Korstange, Engel, Bruneau, Rowland
Members Absent: None
Others Present: Planning Director Hilbrands and those listed on the sign-in sheet.

ARTICLE 2. Pledge of Allegiance

ARTICLE 3. Approve the current agenda

Motion was made by Member Engel to approve the current agenda. Supported by Member Korstange. Motion carried 9 to 0.

ARTICLE 4. Disclose any Conflicts of Interest

There were no conflicts of interest disclosed.

ARTICLE 5. Approve the Minutes of the March 6, 2023 Meeting

Member Bruneau saw an error in Article 5 that the comments made by Member Richardson and Member Bruneau need to be switched.

Member Moxley pointed out that in Article 7 "Moxely" should be changed to "Moxley".

Member Korstange made a correction in Article 10 that Chair Noordyke and herself initially brought up the Roundhill Subcommittee name change.

Member Engel made a name correction in Article 7 that "Robert" should be changed to "Thomas Aaberg".

Member Engel said in Article 9 that "council" should be changed to "counsel".

Member Bruneau saw an error in the last paragraph of Article 9 that "code of conduct" should be changed to "bylaws".

Member Bruneau also wanted the minutes to reflect Member Rowland's potential conflict of interest as a member of Watermark.

Motion was made by Member Moxley to approve the March 6, 2023, Meeting Minutes with the proposed changes. Supported by Member Bruneau. Motion carried 9 to 0.

ARTICLE 6. Acknowledge visitors and those wishing to speak

There was no one who wished to speak.

ARTICLE 7. **Case #22-3701/Woods Builders Homes Inc.**

Property Address: 6105 Charlevoix Woods Ct

Requested Action: Basic Plan Review for an amendment to the PUD Ordinance to allow a 24-unit multi-family apartment complex.

Planning Director Hilbrands explained that this Basic Plan Review was originally brought to the Planning Commission last April and is for 24 apartment units located in 3 buildings on a 4-acre parcel. The property is Master Planned as Community Residential, allowing for multi-family developments and a residential density of 4-6 units per acre. The current PUD was created to permit an adult assisted living facility, so an amendment to the PUD is required to also allow for attached residential.

Staff recommended that the applicant submit the 9 items listed in the packet from the original Basic Plan Review plus one additional item including a Traffic Impact Analysis. This will need to be submitted before the application proceeds to a preliminary development review.

Member Engel asked for clarification on the building being within the front yard setbacks. Planning Director Hilbrands explained since the building is a few feet within the setback, one of the requirements will be to move the building back.

Member Rissi asked about the private road ordinance allowing only 19 units without a secondary entrance. Planning Director Hilbrands said an emergency access easement off the cul-de-sac would be the second point of access. Staff will gather documentation to confirm details of the easement.

Member Bruneau asked about the soil erosion plan and Planning Director Hilbrands said that for any large-scale commercial building, a soil and erosion permit is always required through Kent County Road Commission.

David woods, the applicant, said the responsibility to straighten the road will lead to financial hardships. He said leaving it curved could create traffic calming and it looks better aesthetically. His hope is that the easement would be approved as is without moving the road.

Member Rissi asked about the proposed 11 parking spaces for the development. Planning Director Hilbrands had not yet calculated parking spaces, which will be addressed during the zoning review.

Member Moxley said that 11 parking spaces is not enough. He also agreed with the applicant regarding the curvature of the drive.

Chair Noordyke wanted the applicant to provide proof of easement access.

Some other implementations discussed include sidewalks or a pedestrian lane, more parking, and a maintenance agreement for Charlevoix Ct.

Member Rissi said the sidewalk should not solely be put on the applicant to fund unless it’s on their property.

DRAFT

Member Moxley would like to see a sidewalk along the south property line and said the neighboring retirement complex could benefit by adding on to the pathway.

ARTICLE 8. Review of Proposed Amendments to the Master Plan

Planning Director Hilbrands presented the proposed amendment to the Future Land Use map, as directed by the Planning Commission and Township Board. The amendment would change the future land use designation from Industrial to Rural Residential for an area that followed the boundary of most of the ARC Zoned properties located between the airport and M-6.

Member Rissi shared concerns about changing the classification for the area around 52nd St, but land around 48th St remains the same. He proposed creating a geographical boundary that made more sense to the area.

Chair Noordyke proposed, while referencing the Future Land Use map in the packet, that the AC District Zoning Subcommittee discusses converting the shaded gray area to AC2.

Motion was made by Member Bruneau to recommend the changes noted in the amended Future Land Use map to make the area currently zoned ARC also future land use ARC to the Township Board. Supported by Member Korstange.

Member Bruneau withdrew the motion.

Member Rissi wanted clarification on the motion to keep land currently zoned for ARC to future land use ARC. He didn't know if they were following the boundary indicated on the map or the current zoning.

Planning Director Hilbrands stated he was following the railroad on the map since it acts as a natural buffer.

Motion was made by Member Bruneau to recommend to the Township Board the future land use as drawn to preserve the currently zoned ARC to future land use ARC. Supported by Member Korstange. Motion carried 8 to 1.

There was discussion regarding whether this was appropriate extend of the future land use redesignation, or if it should be extended north to include the entire area between the airport and M-6.

Member Rowland's preference was to change the AC2 land back to ARC.

Member Korstange explained she would recommend changing the currently zoned industrial land to future use of ARC due to the nature of the airport and the potential future implementations of a new entrance and gas station nearby.

Motion was made by Member Engel to withdraw the previous recommendation. Supported by Member Rissi. Motion carried 8 to 1.

Motion was made by Member Korstange to recommend to the Township Board to change the Future Land Use Map as drawn to also include the industrial area north of

Thornapple River Dr to be future land use ARC. This would include the area between the airport and M-6, extending north to the point where Thornapple River Drive crosses I-96 and south to approximately where 60th Street crosses over M-6. Supported by Member Moxley. Motion carried 5 to 4.

There were concerns about traffic increase at the intersection of Thornapple River Dr and 36th Street if there was a gas station nearby.

The new recommendation will be presented to the Township Board on April 12.

ARTICLE 9. Old Business

Member Korstange asked about the CIP and when Manager Swayze would present this. Planning Director Hilbrands will look into this.

Member Moxley mentioned the previous discussion on changing the Roundhill Subcommittee name. Planning Director Hilbrands said the attorney had concerns about naming it after a specific person as this opens up the Township to risk. If the committee were to be named "The Process Implementation Review Committee" there was no perceived issue.

Motion was made by Member Rissi to change the Roundhill Subcommittee name to the Process Implementation Subcommittee on all future documents related to it and change the listing on the website. Supported by Member Engel. Motion carried 9 to 0.

Member Richardson said there is still a downed power line or cable line on 48th Street.

Member Bruneau asked about receiving the meeting packets in a different format.

ARTICLE 10. Any Other Business

There was no other business to discuss.

ARTICLE 11. Acknowledge visitors and those wishing to speak

There was no one who wished to speak.

ARTICLE 12. Adjournment

Motion was made by Member Engel to adjourn the meeting. Supported by Member Korstange. Motion carried 9 to 0. The meeting adjourned at 8:55 PM.

Respectfully submitted,

Joe Engel, Secretary

DRAFT

STAFF REPORT

STAFF REPORT:	Case #22-3739/Northpointe Bank
REPORT DATE:	April 10, 2023
PREPARED FOR:	Cascade Charter Township Planning Commission
MEETING DATE:	April 17, 2023
PREPARED BY:	Brian Hilbrands, Planning Director

APPLICANT:
Progressive AE, Ken Brandsen
1811 4 Mile Rd
Grand Rapids, MI 49525

STATUS OF APPLICANT:	Engineer for Owner
REQUESTED ACTION:	Preliminary Plan Review for an amendment to the PUD Ordinance to accommodate an addition to the existing office building.
EXISTING ZONING OF SUBJECT PARCEL(S):	PUD 25
PROPERTY ADDRESS:	5303 28th Street Ct
GENERAL LOCATION:	West of Meijer at the end of 28th Street Ct
PARCEL SIZE:	Approximately 8.5 acres
EXISTING LAND USE ON THE PROPERTY:	Office – Northpointe Bank
ADJACENT AREA LAND USES:	N – YMCA W – Consumers Energy Easement, Highridge Condos E – Holiday Inn Hotel S – I-96 ROW
ZONING ON ADJOINING PARCELS:	N – PUD 81 W – R1 E – ES (Expressway Service) S – I-96 ROW

STAFF COMMENTS:

1. The applicant is requesting Preliminary Plan Review to amend the existing Planned Unit Development to allow for two additions to the existing office building. The additions

would total approximately 6,438 square feet, bringing the total building size to approximately 97,495 square feet.

2. This was brought in front of the Planning Commission for a Basic Plan Review at the September 14, 2022 meeting. The applicant has provided the required information to proceed to the preliminary plan review.

3. The site was rezoned to PUD in 1988. It was originally rezoned to allow for a multi-tenant retail center. It appears that support for the retail center declined, and in 1993 the PUD was amended to allow for additional uses, including executive, administrative, and business offices.

4. The PUD ordinance limits the size of the building to 90,000 square feet. Since the additions would be exceeding this size, an amendment to the PUD is required.

5. It appears that the size limit was simply what was being requested at the time for the original retail center. With the use changing from a retail center to an office which would be less intense of a use, I do not have a concern with the slight increase in building size.

6. The building would still meet the setback and height requirements of the PUD ordinance.

7. The Township Engineer has reviewed and approved the plans, and their comments are included in your packet. A stormwater maintenance agreement will be required.

8. The Fire Department has reviewed the plans and did not have any concerns.

9. A photometric plan has been submitted that meets Township regulations.

10. If Preliminary Plan Approval is given, then a PUD amendment will be written and brought back before the Planning Commission for a recommendation to the Township Board.

11. Standards

Section 16.03 of the Zoning Ordinance requires that a Planned Unit Development must demonstrate that:

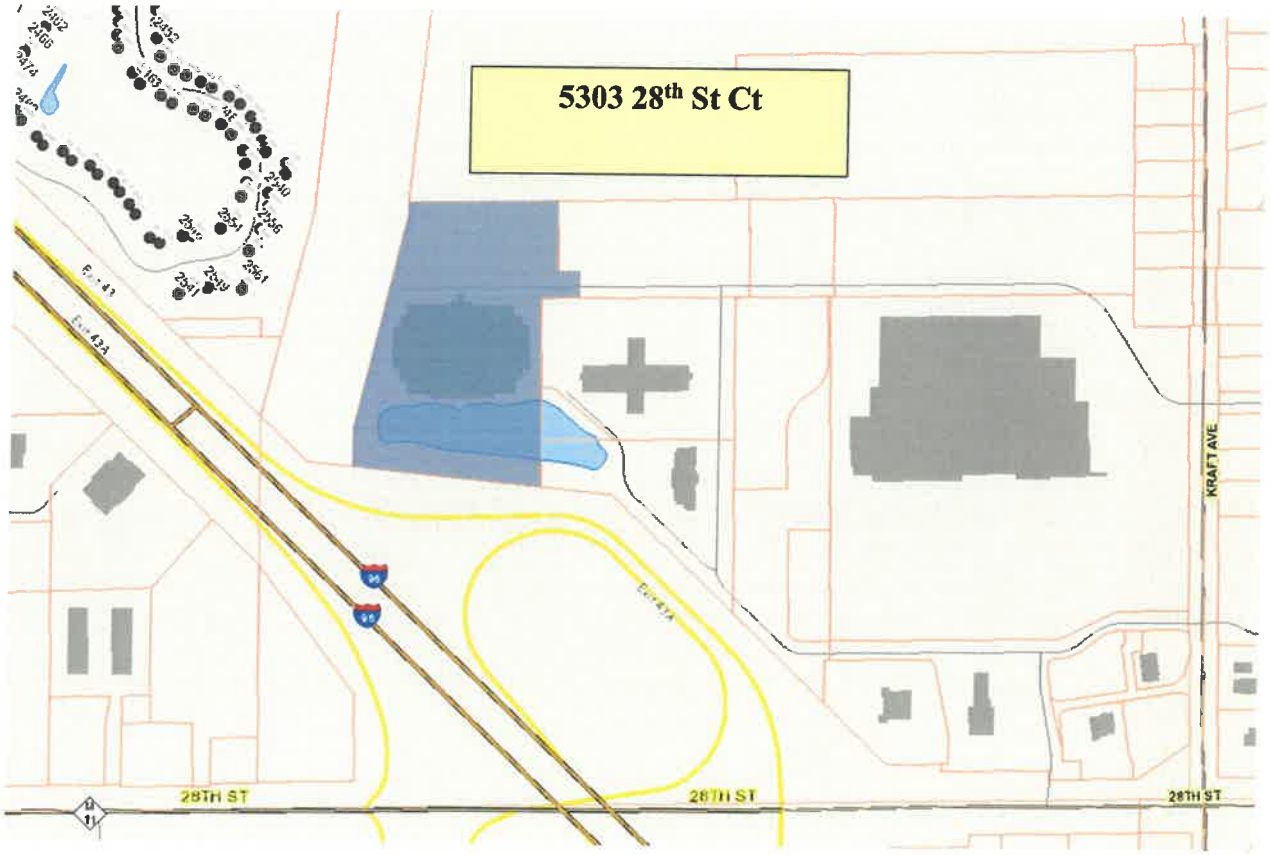
Standard	Staff Comment
Granting of the Planned Unit Development rezoning will result in a recognizable and substantial benefit to the ultimate users of the project and to the community, where such benefit would otherwise be unfeasible or unlikely to be achieved.	The property is already zoned PUD.
In relation to underlying zoning, the proposed type and density of use shall not	The proposed use would not result in an increase in the need of public services.

result in a material increase in the need for public services, facilities and utilities, and shall not place a material burden upon the subject or surrounding land or property owners and occupants or the natural environment.	
The proposed development shall be compatible with the General Development Plan of the Township and shall be consistent with the intent and spirit of this Chapter.	The proposed use is consistent with what has been permitted on the site.
In relation to the underlying zoning, the proposed development shall not result in an unreasonable negative economic impact upon surrounding properties.	The proposed use should not result in an unreasonable economic impact.
The proposed development shall contain at least as much green area and usable open space as would otherwise be required by this Ordinance with respect to the most dominant use in the development.	Met
The proposed development shall be under single ownership or control such that there is a single person or entity having responsibility for completing the project in conformity with this Ordinance. This provision shall not prohibit a transfer of ownership or control, upon due notice to the Planning Director of the Township.	Met

Staff Recommendation
Staff recommends approval of the preliminary plan with the following conditions:

1. The applicant complies with the Township Engineer's letter dated November 18, 2022, and all necessary permits are obtained before construction begins.
2. Record the stormwater maintenance agreement.

ATTACHMENTS: Application
Site Plan
Township Engineer Letter
PUD Ordinance – Home Design Center, #6 of 1988 and #3 of 1993


5303 28th St Ct
28TH ST
28TH ST
28TH ST
KRAFT AVE

CASCADE CHARTER TOWNSHIP

5920 Tahoe Dr. SE, Grand Rapids,
Michigan 49546-7140

PLANNING & ZONING APPLICATION

APPLICANT:

Name: Progressive AE · Ken Brandsen

Address: 1811 4 Mile Rd NE

City & Zip Code: Grand Rapids, MI 49525

Telephone: 616 · 447 · 3329

Email Address: brandsenk@progressivae.com

OWNER: * (If different from Applicant)

Name: Northpointe Bank · Ashley Moser

Address: 5303 28th St. CT SE

City & Zip Code: Grand Rapids, MI 49512

Telephone: 616 · 974 · 8427

Email Address: ashley.moser@northpointe.com

NATURE OF THE REQUEST: (Please check the appropriate box or boxes)

☐	Administrative Appeal	☐	Administrative Site Plan Review
☐	Deferred Parking	☐	P.U.D. – Rezoning *
☑	P.U.D. – Site Condominium *	☐	Rezoning
☐	Site Plan Review *	☐	Sign Variance Subdivision
☐	Special Use Permit	☐	Plat Review *
☐	Zoning Variance	☐	Other:_____*

**** Requires an initial submission of 5 copies of the completed site plan***

BRIEFLY DESCRIBE YOUR REQUEST:**

In support of an office consolidation, the existing 91,057 SF facility will expand by 6,438 SF totaling 97,495 SF.

(**Use Attachments if Necessary)

-SEE OTHER SIDE-

LEGAL DESCRIPTION OF PROPERTY:**

see attached ALTA survey
dated 9/23/19.

(**Use Attachments if Necessary)

PERMANENT PARCEL (TAX) NUMBER: 41-19 - 07 - 451 - 013

ADDRESS OF PROPERTY: 53303 28th St. Ct SE, Grand Rapids, MI 49512

PRESENT USE OF THE PROPERTY: Business

NAME(S) & ADDRESS(ES) OF ALL OTHER PERSONS, CORPORATIONS, OR FIRMS HAVING A LEGAL OR EQUITABLE INTEREST IN THE PROPERTY:

Name(s)	**Address(es)**

SIGNATURES

I (we) the undersigned certify that the information contained on this application form and the required documents attached hereto are to the best of my (our) knowledge true and accurate. I (we) also agree to reimburse the Cascade Charter Township for all costs, including consultant costs, to review this request in a timely manner. I (we) understand that these costs may also include administrative reviews which may occur after the Township has taken action on my (our) request.

I (we) the undersigned also acknowledge that the proposed project does not violate any known property restrictions (i.e. plat restrictions, deed restrictions, covenants, etc.)

Ashley L. Moser
Owner – Print or Type Name
(*If different from Applicant)

*
Owner's Signature & Date
(*If different from Applicant)

Kendall Brandsen
Applicant – Print or Type Name

Applicant's Signature & Date

PLEASE ATTACH ALL REQUIRED DOCUMENTS NOTED IN THE PROCESS REVIEW SHEET – THANK YOU

Rev. 7/27/21

NORTHPOINTE BANK

NPB OPS CENTER - PHASE 2

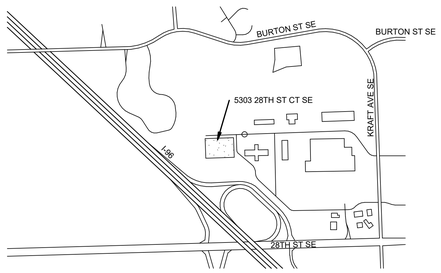
5303 28TH ST. CT SE
GRAND RAPIDS, MI, 49512

PROJECT NARRATIVE

PHASE I: OFFICE ADDITION IN THE NORTHEAST CORNER OF THE EXISTING BUILDING TO ACCOMMODATE EXECUTIVE OFFICE EXPANSION ALONG WITH A RENOVATION OF THE INTERIOR SPACE.

PHASE II: ADDITION OF THE SOUTHEAST AND SOUTH WEST CORNERS OF THE BUILDING TO ACCOMMODATE AN OFFICE EXPANSION ALONG WITH A RENOVATION OF THE INTERIOR SPACE.

PROJECT LOCATION



DRAWING INDEX - PHASE 2

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TD001-B TITLE DRAWING
G001-B PROJECT INFORMATION AND TYPICAL DETAILS
G101-B CODE COMPLIANCE PLAN

CIVIL
C100-B SITE CONTEXT PLAN
C101-B SITE DEMOLITION PLAN
C201-B SITE LAYOUT PLAN
C301-B SITE GRADING PLAN

STRUCTURAL
S001-B GENERAL NOTES - PHASE II
S002-B DESIGN CRITERIA AND SCHEDULES - PHASE II
S003-B SPECIAL INSPECTIONS - PHASE II
S101-B FOUNDATION PLANS - PHASE II
S102-B FRAMING PLANS - PHASE II
S201-B ELEVATIONS
S301-B TYPICAL CONCRETE DETAILS - PHASE II
S501-B TYPICAL STEEL DETAILS-PHASE II

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A103-B ROOF PLAN
A111-B OVERALL REFLECTED CEILING PLAN
A112-B ENLARGED REFLECTED CEILING PLAN - PART A & B
A121-B OVERALL FINISH PLAN - PART SE & SW
A122-B ENLARGED FINISH PLAN - PART SE & SW
A201-B EXTERIOR ELEVATIONS
A301-B BUILDING SECTIONS
A302-B WALL SECTIONS
A303-B WALL SECTIONS
A311-B EXTERIOR & INTERIOR DETAILS
A601-B DOOR AND WINDOW SCHEDULE, ELEVATIONS, AND DETAILS Copy 1

progressive | ae

PROGRESSIVE AE, INC
300 Ottawa Ave SW | Grand Rapids, MI 49503 | 616.361.2664
330 South Tryon St, Suite 500 | Charlotte, NC 28202 | 704.731.8080 www.progressiveae.com

NORTHPOINTE BANK
NPB OPS CENTER - PHASE 2
5303 28TH ST. CT SE
GRAND RAPIDS, MI, 49512

CO-A ARCHITECT *CO-A ENGINEER*

NOT FOR CONSTRUCTION

ISSUANCE
8/26/2022 *PUD AMENDMENT SUBMITTAL*

PROJECT NUMBER
93810001
PROJECT MANAGER
J. HORMAN
PROFESSIONAL
R. D'ALESSANDRO
DRAWN BY
L. MUASHER, J. STONE
CHECKED BY
R. D'ALESSANDRO

TITLE DRAWING
TD001-B

8/26/2022 11:59:27 AM Autodesk Docs://93810001 - Northpointe Bank Operations Center/93810001-NPB-DESIGN.rvt
TD001-B
TITLE DRAWING
THIS DOCUMENT HAS BEEN PREPARED BY PROGRESSIVE AE, INC
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SITE CONTEXT PLAN

NORTH 1"= 30' 0 30'

CALL 811 NOTE:

CONTRACTOR TO CONTACT 811 SERVICE AT LEAST 3 WORKING DAYS PRIOR TO CONSTRUCTION, TO CONFIRM LOCATION OF EXISTING UTILITIES. DIAL 811.

www.CALL811.com

SURVEY LEGEND

	MONUMENT
	PROPERTY IRON SET
	PROPERTY IRON FOUND
	TRAFFIC SIGNAL POLE
	BOLLARD LIGHT
	LIGHT POLE
	FLOOD LIGHT
	SIGN
FP	FLAG POLE
CO	CLEANOUT
P.P.	POWER POLE
T.P.	TELEPHONE POLE
HH	ELECTRICAL HAND HOLE
T E C G W	TEL., ELEC., CATV, GAS, WATER RISER
T E G W	TEL., ELEC., GAS, WATER MANHOLE
P P P P	TEL., ELEC., CATV, GAS MARKER
	CATCH BASIN
	MANHOLE
SPR	SPRINKLER
	VALVE & BOX
	HYDRANT
X 000.0	SPOT ELEVATION
000	MAJOR CONTOUR - 5 FT. INTERVAL
001	MINOR CONTOUR - 1 FT. INTERVAL
	GUARD RAIL
X	FENCE LINE
	STORM SEWER
	SANITARY SEWER
	WATERMAIN
G	GAS MAIN
T	UNDERGROUND TELEPHONE LINE
FO	UNDERGROUND FIBER OPTIC LINE
UGE	UNDERGROUND ELECTRIC LINE
	DITCH CENTERLINE, TOE OF SLOPE
	DECIDUOUS TREE
	CONIFEROUS TREE
	TREE & BRUSH LINE
	BUILDING

SURVEY NOTES

1. EXISTING UTILITIES ARE LOCATED TO THE BEST OF OUR KNOWLEDGE. THE CONTRACTOR WILL BE RESPONSIBLE FOR VERIFYING EXISTING UTILITY LOCATIONS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL PROTECT AND MAINTAIN EXISTING UTILITY SERVICES AT ALL TIMES.
2. SERVICE PROVIDED IS A TOPOGRAPHIC SURVEY, NOT A BOUNDARY SURVEY. PROPERTY LINES ARE SHOWN IN APPROXIMATE LOCATION

BENCHMARKS:

BM #1 ELEVATION = 744.00
TOP OF SE FLANGE BOLT TO HYD ABOVE "W" OF WATEROUS SW CORNER OF BLDG
BM #2 ELEVATION = 745.26
TOP OF SW FLANGE BOLT TO HYD ABOVE "W" OF WATEROUS SE CORNER OF BLDG
BM #3 ELEVATION = 745.37
TOP OF NW FLANGE BOLT TO HYD ABOVE "W" OF WATEROUS NE CORNER OF BLDG

SURVEY

DATE:	06/02/2022
PAE(P) LOG BOOK NO.:	22-00
PAGES:	27
DATUM:	GPS GRID NORTH/MI STATE PLANE SOUTH 83/NAVD88

progressive ae
1811 4 Mile Rd NE | Grand Rapids, MI 49525 | 616.361.2694
330 South Tryon St, Suite 500 | Charlotte, NC 28202 | 704.731.6580 www.progressiveae.com

NORTHPOINTE BANK
NPB OPS CENTER - PHASE 2
5303 28TH STREET SE, GRAND RAPIDS, MI 49512

CO/A ARCHITECT CO/A ENGINEER

NOT FOR CONSTRUCTION

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ISSUANCE

08/26/2022 PUD AMENDMENT SUBMITTAL

PROJECT NUMBER
93810001
PROJECT MANAGER
J. HORMAN
PROFESSIONAL
S. TEITSMA
DRAWN BY
S. TEITSMA
CHECKED BY

SITE CONTEXT PLAN
C100-B

8/26/2022 2:24:24 PM
P:\93810001\03 NPC\2 BM\10.- C100-B - SITE CONTEXT - PHASE 2.dwg willsid
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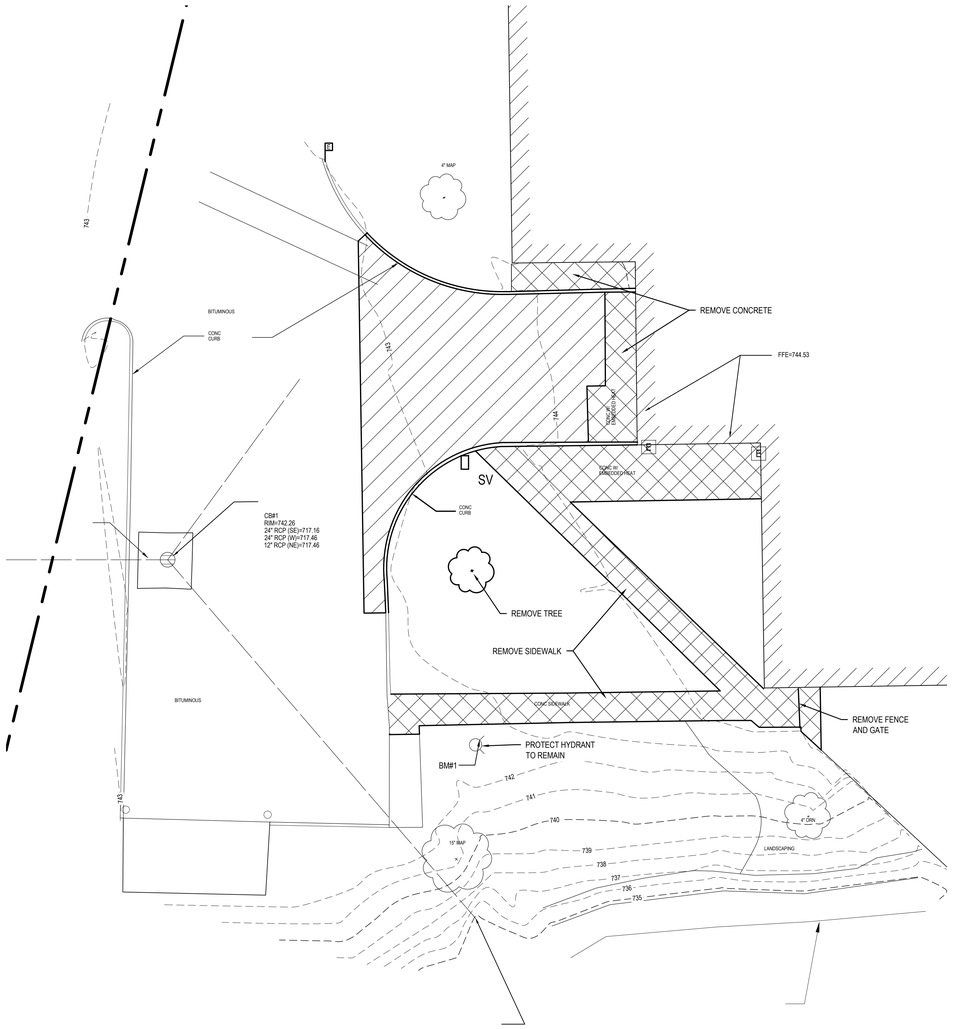
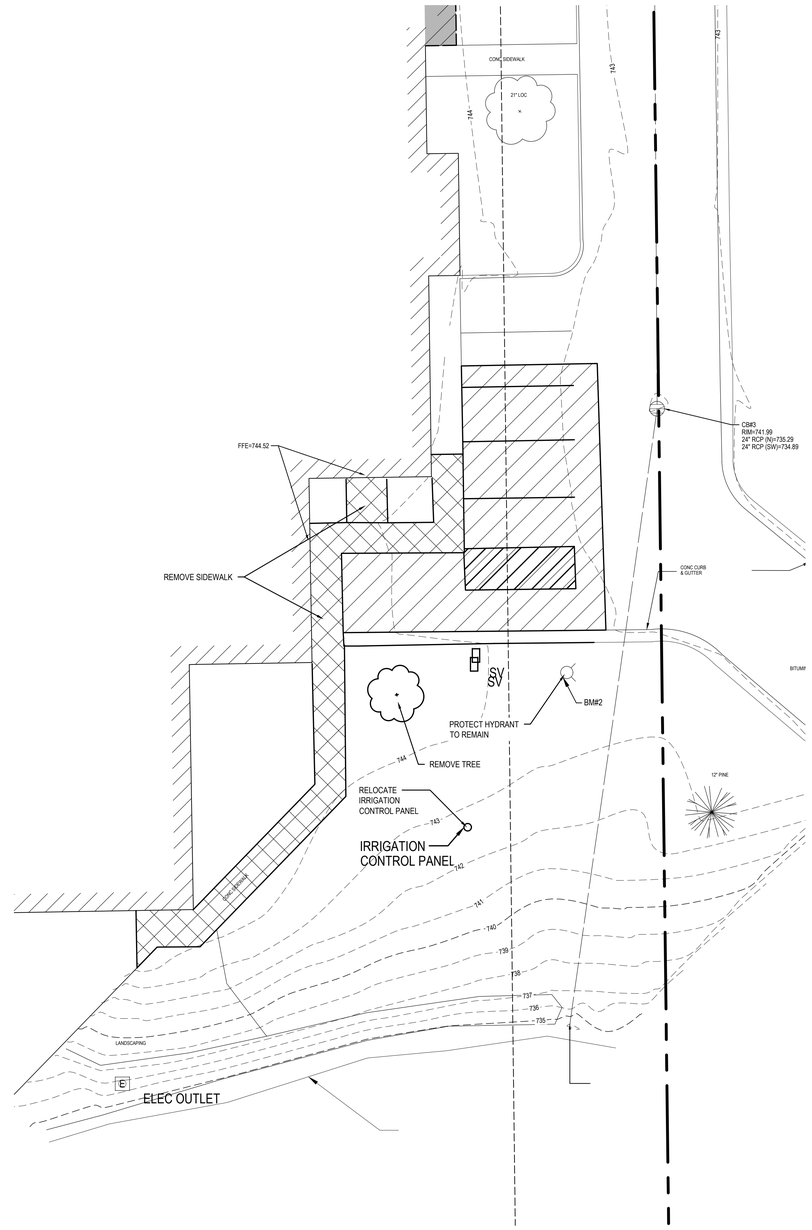


SW QUADRANT - SITE DEMOLITION PLAN

NORTH 1"= ##' 0 ##'



SE QUADRANT - SITE DEMOLITION PLAN

NORTH 1"= ##' 0 ##'

DEMOLITION LEGEND

- BITUMINOUS PAVEMENT REMOVAL
- CONCRETE REMOVAL
- TREE REMOVAL
- ABANDON UTILITY LINE
- REMOVE CURB & GUTTER
- REMOVE ITEM

ALL ITEMS IN BOLD TO BE REMOVED UNLESS OTHERWISE NOTED.

SITE CLEARING AND DEMOLITION NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE SITE AND BECOMING FAMILIAR WITH THE DEMOLITION AND CLEARING REQUIREMENTS.
2. NO REMOVAL, DEMOLITION, CLEARING OR TOPSOIL REMOVAL SHALL OCCUR ON SITE UNTIL THE SESC AND STORMWATER PERMITS HAVE BEEN ISSUED AND THE CONTRACTOR HAS VERIFIED AND STAKED THE LIMITS OF REMOVAL IN THE FIELD. NOTIFY SITE CONSULTANT OF THE START OF CONSTRUCTION AND DATE WHEN THE LIMITS LINE WILL BE ESTABLISHED FOR REVIEW AND APPROVAL.
3. ALL MATERIALS NOTED TO BE SALVAGED SHALL BE TURNED OVER TO THE OWNER OR REINSTALLED ON SITE AS NOTED.
4. NO BURNING OR BURYING OF CLEARED OR DEMOLITION MATERIAL SHALL BE ALLOWED ON SITE.
5. REMOVE ALL STRUCTURES, FOUNDATIONS, BITUMINOUS PAVEMENT, CONCRETE SIDEWALK STEPS AND OTHER EXISTING SITE FEATURES AS INDICATED ON THE DRAWINGS. ALSO, REMOVE ALL DEBRIS FROM WITHIN CONSTRUCTION LIMITS ON SITE. ALL DEMOLITION MATERIALS SHALL BE REMOVED FROM THE SITE AND, UNLESS OTHERWISE NOTED, DISPOSED OF IN A MANNER ACCEPTABLE TO LOCAL JURISDICTION HAVING AUTHORITY.
6. THE CONTRACTOR SHALL BE LICENSED BY THE STATE OF MICHIGAN FOR DEMOLITION REMOVAL AND HAULING OF MATERIALS.
7. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN ALL PERMITS AND FEES FOR THIS WORK.
8. EXISTING UTILITIES ARE LOCATED TO THE BEST OF OUR KNOWLEDGE. THE CONTRACTOR WILL BE RESPONSIBLE FOR VERIFYING EXISTING UTILITY LOCATIONS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL PROTECT AND MAINTAIN EXISTING UTILITY SERVICES AT ALL TIMES.
9. ALL EXCESS OR UNSUITABLE TOPSOIL OR SUBSOIL TO BECOME THE PROPERTY OF THE CONTRACTOR AND REMOVED OFFSITE.
10. PROTECT EXISTING TREES UNLESS OTHERWISE NOTED. NO PARKING OR STORAGE OF MATERIALS WITHIN TREE ROOT ZONE. PLACE TREE PROTECTION FENCE WHERE SHOWN ON PLAN.
11. TREE PROTECTION FENCE - ORANGE SAFETY FENCE AROUND TREES SUPPORTED BY STEEL T-BAR FENCE POSTS. ZIP TIE FABRIC TO POSTS. INSTALL PRIOR TO ANY CONSTRUCTION ACTIVITY AND MAINTAIN DURING ENTIRE CONSTRUCTION PERIOD.
12. CONTRACTOR TO CALL 811 AT LEAST 3 WORKING DAYS PRIOR TO CONSTRUCTION, TO CONFIRM LOCATION OF EXISTING UTILITIES.
13. CONTRACTOR MUST RESTORE AND REPAIR ANY EXISTING CONDITIONS DISTURBED BY CONSTRUCTION.
14. ANY AREA DISTURBED BY CONSTRUCTION TO BE RESTORED TO CONDITION EQUAL TO OR BETTER THAN BEFORE CONSTRUCTION BEGAN. PATCH PAVEMENT IN-KIND IF REQUIRED.
15. SAWCUT FULL DEPTH ALL EDGES OF PAVEMENT TO BE REMOVED.
16. ALL GROUND AREAS DISTURBED BY CONSTRUCTION TO BE TOPSOILED AND SEEDED PER THE SITE LANDSCAPE PLAN UNLESS SHOWN OTHERWISE ON PLANS.

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ISSUANCE
08/26/2022 PUD AMENDMENT

PROJECT NUMBER
93810001
PROJECT MANAGER
J. HORMAN
PROFESSIONAL
S. TEITSMA
DRAWN BY
S. TEITSMA
CHECKED BY

SITE DEMOLITION PLAN
C101-B

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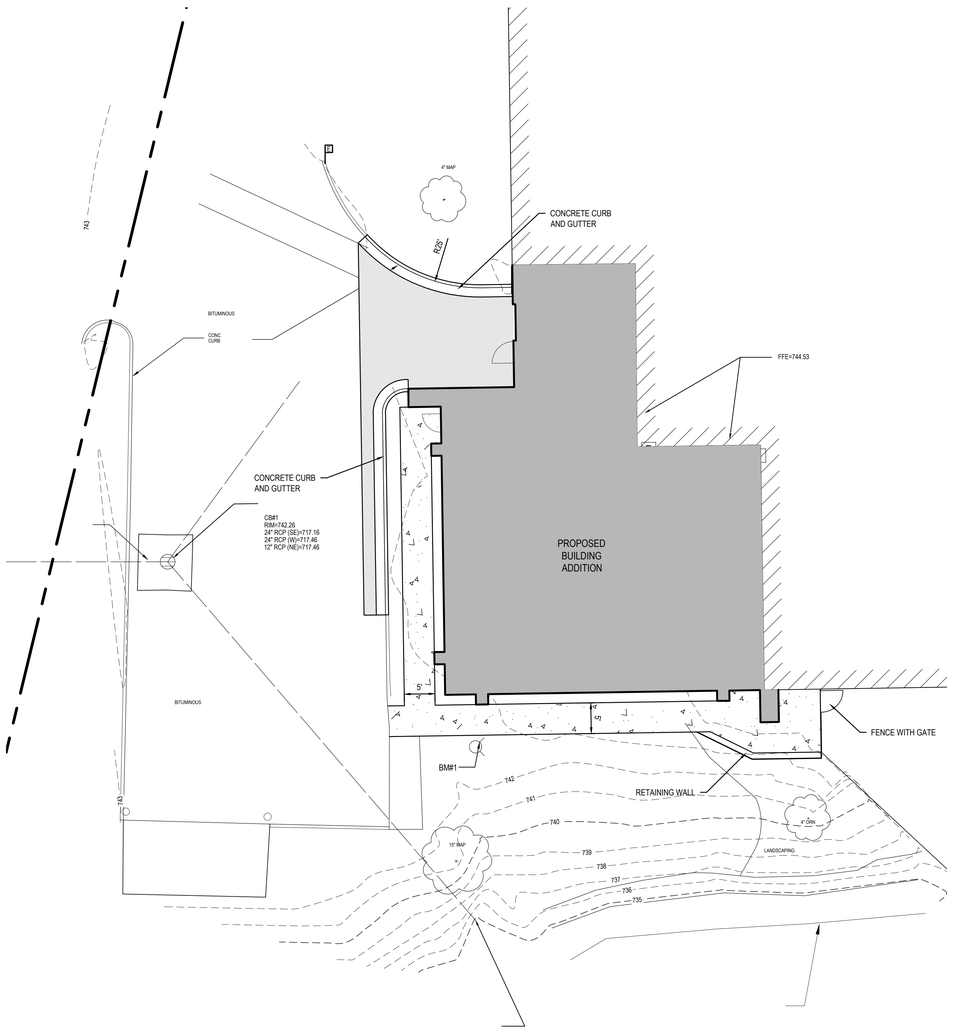
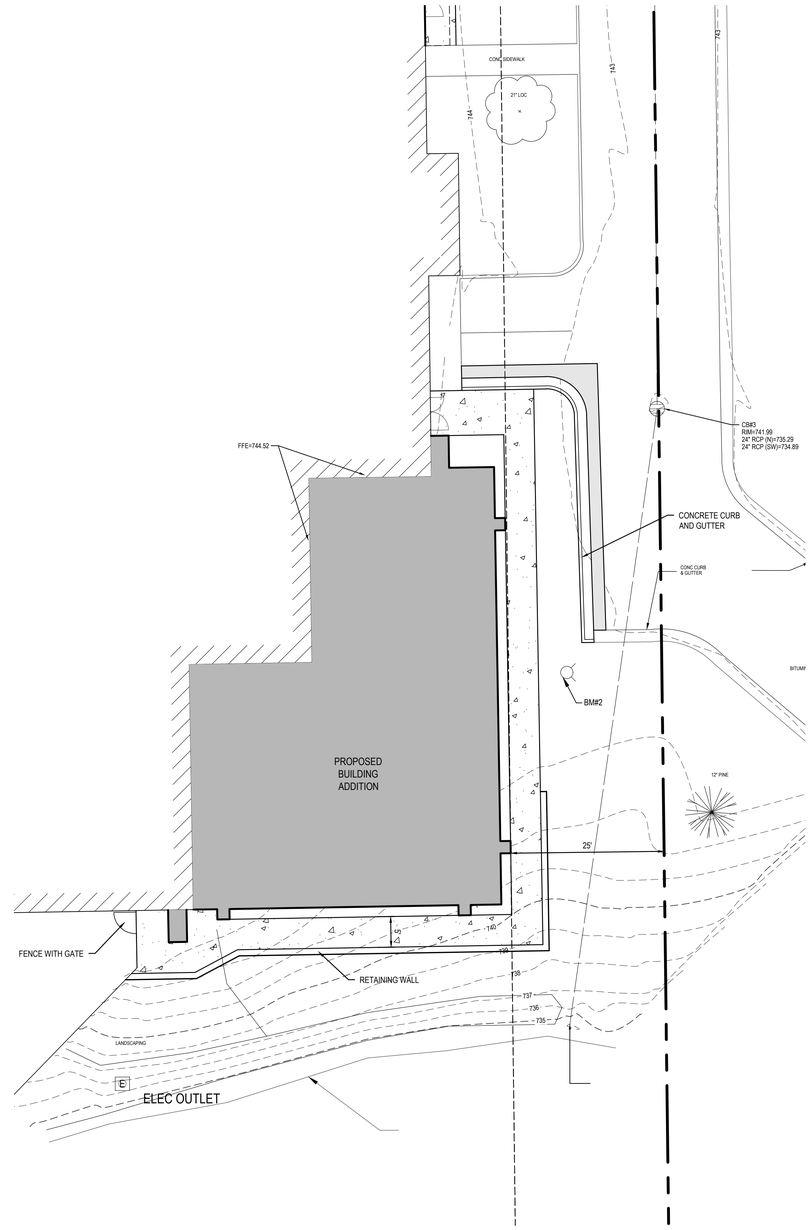


SW QUADRANT - SITE LAYOUT PLAN

NORTH 1"= ##' 0 ##'



SE QUADRANT - SITE LAYOUT PLAN

NORTH 1"= ##' 0 ##'

PAVEMENT LEGEND

STANDARD CURB AND GUTTER

PITCH OUT CURB AND GUTTER

BITUMINOUS PAVEMENT

- 1 1/2" (165 LB/SYD) MDOT 36A BIT. WEARING COURSE
- MDOT TACK COAT @ 0.15 GAL/SY
- 1 1/2" (165 LB/SYD) MDOT 13A BIT. LEVELING COURSE
- 6" AGGREGATE BASE, MDOT 21AA MOD
- 12" SUBBASE, CL II SAND OR APPROVED NATIVE MATERIAL

CONCRETE SIDEWALK

- 4" CONCRETE
- 4" MDOT CLASS II GRANULAR BASE
- APPROVED COMPACTED SUBBASE

GENERAL SITE LAYOUT NOTES

1. ALL WORKMANSHIP AND MATERIALS SHALL BE ACCORDING TO THE CURRENT MICHIGAN DEPARTMENT OF TRANSPORTATION (M.D.O.T) STANDARD SPECIFICATIONS FOR CONSTRUCTION.
2. CONTACT "MISS DIG" TOLL FREE AT 1-800-482-7171 THREE (3) DAYS PRIOR TO THE START OF CONSTRUCTION, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS.
3. NO DIMENSION MAY BE SCALED. REFER UNCLEAR ITEMS TO THE ENGINEER FOR INTERPRETATION.
4. DIMENSIONS SHOWN ARE TO FACE OF CURB UNLESS OTHERWISE NOTED AS B-B (BACK TO BACK) OR E-E (EDGE OF METAL TO EDGE OF METAL).
5. CONTRACTOR TO PAINT STRIPE ALL PARKING SPACES SHOWN. PAINT COLOR TO BE YELLOW.
6. UPON REQUEST, ELECTRONIC INFORMATION WILL BE PROVIDED FOR SITE LAYOUT PURPOSES. CONTRACTOR SHALL REQUEST ALL INFORMATION IN WRITING THROUGH PROGRESSIVE AE. LAYOUT OF ALL NEW CONSTRUCTION SHALL BE DONE BY A LICENSED SURVEYOR.
7. ALL CONCRETE JOINTS SHALL BE TOOLED PER SPECIFICATIONS.
8. CONTRACTOR MUST RESTORE AND REPAIR ANY EXISTING CONDITIONS DISTURBED BY CONSTRUCTION. THIS IS TO INCLUDE BURIED UTILITIES, LIGHTING, LANDSCAPING, SPRINKLING, ETC.
9. ANY AREA DISTURBED BY CONSTRUCTION TO BE RESTORED TO CONDITION EQUAL TO OR BETTER THAN BEFORE CONSTRUCTION BEGAN.
10. ALL PAVEMENT, CURB & GUTTER, SIDEWALK AND UTILITIES WITHIN PUBLIC RIGHT OF WAY SHALL MEET CITY OF GRAND RAPIDS STANDARDS.

GENERAL LANDSCAPE NOTES

1. CONTRACTOR RESPONSIBLE FOR UNDERSTANDING PROJECT CONDITIONS AND VERIFYING PLANT QUANTITIES. NOTIFY LANDSCAPE ARCHITECT OF ANY PLAN DISCREPANCIES.
2. PLANT LOCATIONS TO BE STAKED IN THE FIELD FOR REVIEW AND APPROVAL BY LANDSCAPE ARCHITECT AND OWNER.CONTRACTOR WILL BE RESPONSIBLE FOR VERIFYING ALL EXISTING UNDERGROUND UTILITIES. CONTACT THE APPROPRIATE UTILITY COMPANY FOR FIELD STAKING ALL LINES.
3. ALL AREAS DISTURBED BY CONSTRUCTION TO BE TOPSOILED AND SEEDED UNLESS SHOWN OTHERWISE ON PLANS
4. CONTRACTOR TO CONTACT MISS DIG AT PHONE NUMBER 811 AT LEAST 3 WORKING DAYS PRIOR TO CONSTRUCTION, TO CONFIRM LOCATION OF EXISTING UTILITIES.
5. CONTRACTOR TO COORDINATE PLANTING SCHEDULE WITH IRRIGATION CONTRACTOR.
6. NOTIFY LANDSCAPE ARCHITECT IF AREAS OF POOR DRAINAGE OR OTHER UNUSUAL SUB-GRADE CONDITIONS ARE ENCOUNTERED DURING EXCAVATION FOR PLANTING PITS.
7. SHRUB PLANTING BEDS AND TREE SAUCERS TO RECEIVE 3" SHREDDED HARDWOOD MULCH, PERENNIAL BEDS TO RECEIVE 2" DEPTH MULCH AND GROUND COVER AREAS TO RECEIVE 1" DEPTH MULCH.
8. ALL SHRUB BEDS TO HAVE ALUMINUM EDGING AND WEED BARRIER FABRIC.
9. PLANTING MIXTURE FOR PERENNIALS SHALL BE SIX INCH DEPTH OF FOUR PARTS BY VOLUME OF TOPSOIL TO ONE PART OF SPHAGNUM PEAT MOSS.
10. CONTRACTOR SHALL PROVIDE SPECIFIED SHRUBS, GROUND COVERS AND OTHER PLANT MATERIALS THAT COMPLY WITH ALL RECOMMENDATIONS AND REQUIREMENTS OF ANSI Z60.1 "AMERICAN STANDARD FOR NURSERY STOCK". PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS STOCK, GROWN WITH GOOD HORTICULTURAL PRACTICE AND INSTALLED IN ACCORDANCE WITH METHODS ESTABLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
11. CONTRACTOR TO PROTECT EXISTING IRRIGATION SYSTEM AS MUCH AS POSSIBLE. REPAIR DAMAGE TO EXISTING IRRIGATION SYSTEM AND RECONFIGURE SPRINKLER LAYOUT TO ACCOMMODATE THE NEW IMPROVEMENTS.

SEED MIXTURE

EGS GREEN GROUNDS SEED MIX *Note: High end mix*

19.96% KELLY KENTUCKY BLUEGRASS
19.94% BARON KENTUCKY BLUEGRASS
19.91% SOX FAN PERENNIAL RYEGRASS
19.82% EXACTA II GLSR PERENNIAL RYEGRASS
19.73% JUMPSTART KENTUCKY BLUEGRASS

BY ECO GREEN SUPPLY, SEED AT RATE OF 5-7 LBS, PER 1,000 SQ. FT.

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ISSUANCE

08/26/2022 PUD AMENDMENT SUBMITTAL

PROJECT NUMBER
93810001
PROJECT MANAGER
J. HORMAN
PROFESSIONAL
S. TEITSMA
DRAWN BY
S. TEITSMA
CHECKED BY

SITE LAYOUT PLAN
C201-B

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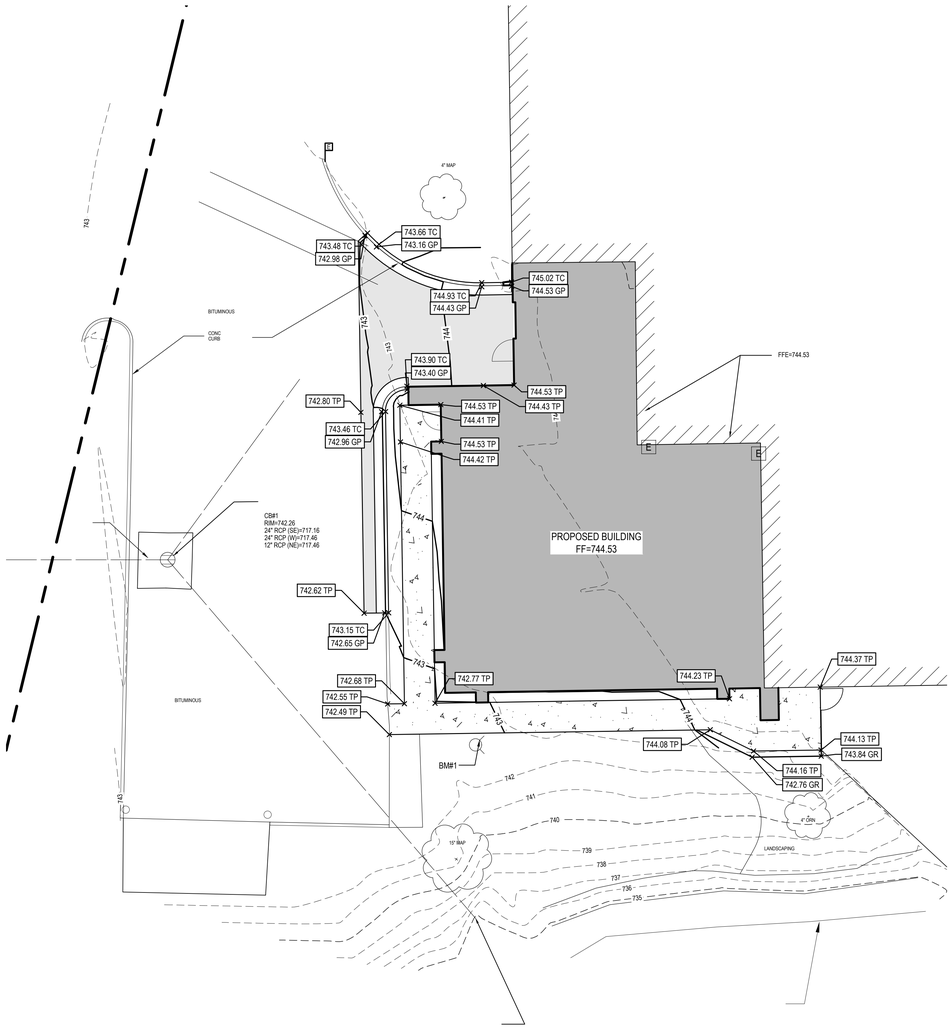
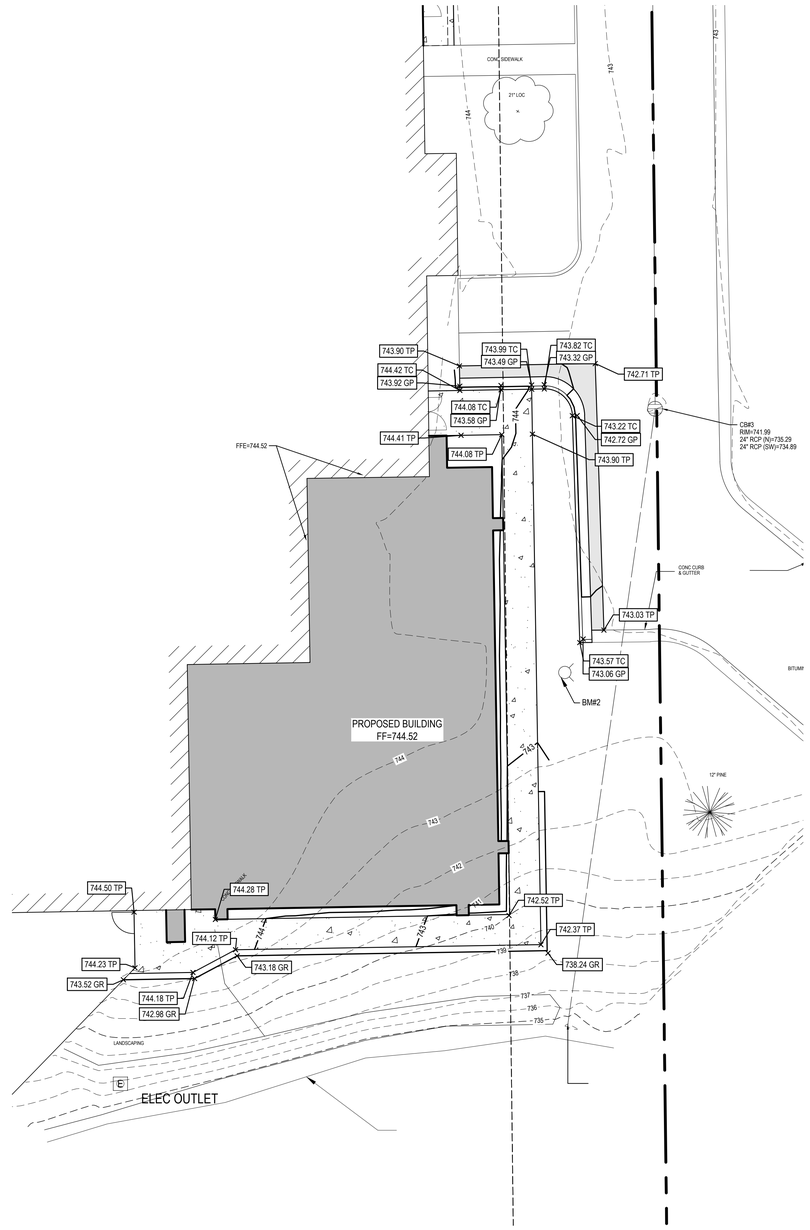


SW QUADRANT - SITE GRADING PLAN

NORTH 1"= ##' 0 ##'



SE QUADRANT - SITE GRADING PLAN

NORTH 1"= ##' 0 ##'

BARRIER FREE NOTES

1. BARRIER FREE PARKING AND ACCESSIBLE ROUTE(S) MUST COMPLY WITH THE AMERICANS WITH DISABILITIES ACT, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
2. 2% MAXIMUM CROSS SLOPE ON ACCESSIBLE ROUTE(S)
3. 5% MAXIMUM LONGITUDINAL SLOPE (DIRECTION OF TRAVEL) UNLESS AT BARRIER FREE RAMP
4. 2% MAXIMUM SLOPE LONGITUDINAL AND TRANSVERSE SLOPES AT BARRIER FREE PARKING SPACES AND ASSOCIATED ACCESS AISLES
5. ACCESSIBLE ENTRIES - 2% MAXIMUM SLOPE IN ANY DIRECTION FOR THE FIRST 5' FROM ENTRY DOOR
6. CONTRACTOR TO CONTACT ENGINEER PRIOR TO PAVING IF BARRIER FREE SLOPES DO NOT COMPLY OR FOR CLARIFICATION OF ANY DISCREPANCIES.

EARTHWORK & GRADING NOTES

1. EARTHWORK AND PAVEMENT CONSTRUCTION ARE TO BE PERFORMED IN ACCORDANCE WITH THE 2012 EDITION OF THE MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION UNLESS OTHERWISE NOTED IN THE FOLLOWING ITEMS.
2. THE SUBGRADE SHALL BE THOROUGHLY PROOFROLLED USING THE EQUIVALENT OF A FULLY LOADED TANDEM AXLE TRUCK HAVING A MINIMUM AXLE WEIGHT OF 10 TONS. SOFT OR YIELDING AREAS THAT CANNOT BE MECHANICALLY STABILIZED SHOULD BE REMOVED AND REPLACED WITH ENGINEERED FILL.
3. PROOFROLLING SHALL BE PERFORMED UNDER THE OBSERVATION OF A GEOTECHNICAL/PAVEMENT ENGINEER.
4. FINISHED SUBGRADE SURFACE SHALL NOT BE MORE THAN O.1 FEET ABOVE OR BELOW ESTABLISHED FINISHED SUBGRADE ELEVATIONS AND ALL GROUND SURFACES SHALL VARY UNIFORMLY BETWEEN INDICATED ELEVATIONS. FINISHED DITCHES SHALL BE GRADED TO ALLOW FOR PROPER DRAINAGE WITHOUT PONDING AND IN A MANNER THAT WILL MINIMIZE EROSION.
5. GRADE THE AGGREGATE BASE MATERIAL TO PROVIDE POSITIVE DRAINAGE AT A MINIMUM OF 1.5 PERCENT.
6. THE AGGREGATE BASE AND SUBBASE SHALL EXTEND 12 INCHES BEYOND THE PAVED EDGE.
7. THE EXISTING (SOIL TYPE) MAY BE UTILIZED AS ENGINEERED FILL PROVIDED ALL DELETERIOUS OR ORGANIC MATERIALS ARE REMOVED FROM THE SOILS. ANY ON-SITE SOILS USED FOR ENGINEERED FILL SHALL BE EVALUATED BY A GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT.
8. ENGINEERED FILL LOCATED WITHIN PAVEMENT AND BUILDING AREAS SHALL BE PLACED IN 8 INCH MAXIMUM LOOSE THICKNESS AND MOISTURE CONDITIONED TO WITHIN 2 PERCENT OF OPTIMUM MOISTURE CONTENT. COMPACT TO MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY PER ASTM D-1557, MODIFIED PROCTOR METHOD
9. ALL FILL OPERATIONS SHALL BE OBSERVED BY A QUALIFIED SOIL TECHNICIAN. A MINIMUM OF ONE COMPACTION TEST SHALL BE CONDUCTED PER 2,500 SFT AREA AT EACH LIFT. WITHIN TRENCH EXCAVATIONS, ONE TEST SHALL BE CONDUCTED FOR EACH 100 LINEAR FEET PER LIFT.
10. SIDE SLOPES SHALL NOT EXCEED 1 VERTICAL OVER 3 HORIZONTAL SLOPE UNLESS SHOWN OTHERWISE.
11. EXCESS TOPSOIL SHALL BE SPOILED ON SITE IN LOCATION DETERMINED WITH OWNER AND ENGINEER AND SEEDED.
12. PARKING LOT CURBS SHALL BE BUILT WITH REVERSE SLOPE ON THE DOWNHILL SIDE OF THE ISLAND TO ASSURE POSITIVE STORM WATER RUNOFF TO CATCH BASINS.
13. UNLESS SHOWN OTHERWISE, FINISH GRADES OF LAWN/LANDSCAPE ADJACENT TO BUILDING WALLS SHALL BE 6" BELOW FINISH FLOOR ELEVATION.
14. PLACE 4" MINIMUM TOPSOIL IN ALL LANDSCAPE AREAS TO BE SEEDED. PROVIDE POSITIVE DRAINAGE AT ALL TIMES TO ENSURE NO STANDING WATER WITHIN PAVEMENT, BUILDING PAD, OR GREEN AREAS.
15. FOR ALL CURB ISLANDS, CENTER OF ISLANDS TO BE A MINIMUM OF 6" HIGHER THAN TOP OF CURB.
16. THE SITE MAY BE DESIGNATED AS A FACILITY BECAUSE OF ENVIRONMENTAL IMPACTS. IN THE EVENT MATERIALS MUST BE REMOVED FROM THE SITE, TRANSPORTATION, HANDLING AND DISPOSAL OF EXCAVATED SOIL MATERIALS SHOULD BE PERFORMED IN ACCORDANCE WITH APPLICABLE ENVIRONMENTAL REGULATIONS.

GRADING LEGEND

	FLOW ARROW
TP	TOP OF PAVEMENT
TC	TOP OF CURB
TW	TOP OF WALL
BW	BOTTOM OF WALL
GR	GROUND
GP	GUTTER PAN
FF	FINISH FLOOR ELEVATION
EX	EXISTING ELEVATION
HP	HIGH POINT
LP	LOW POINT
L	LANDING
R	RAMP

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ISSUANCE

08/26/2022 PUD AMENDMENT SUBMITTAL

PROJECT NUMBER
53810001
PROJECT MANAGER
J. HORMAN
PROFESSIONAL
S. TEITSMA
DRAWN BY
S. TEITSMA
CHECKED BY

SITE GRADING PLAN
C301-B

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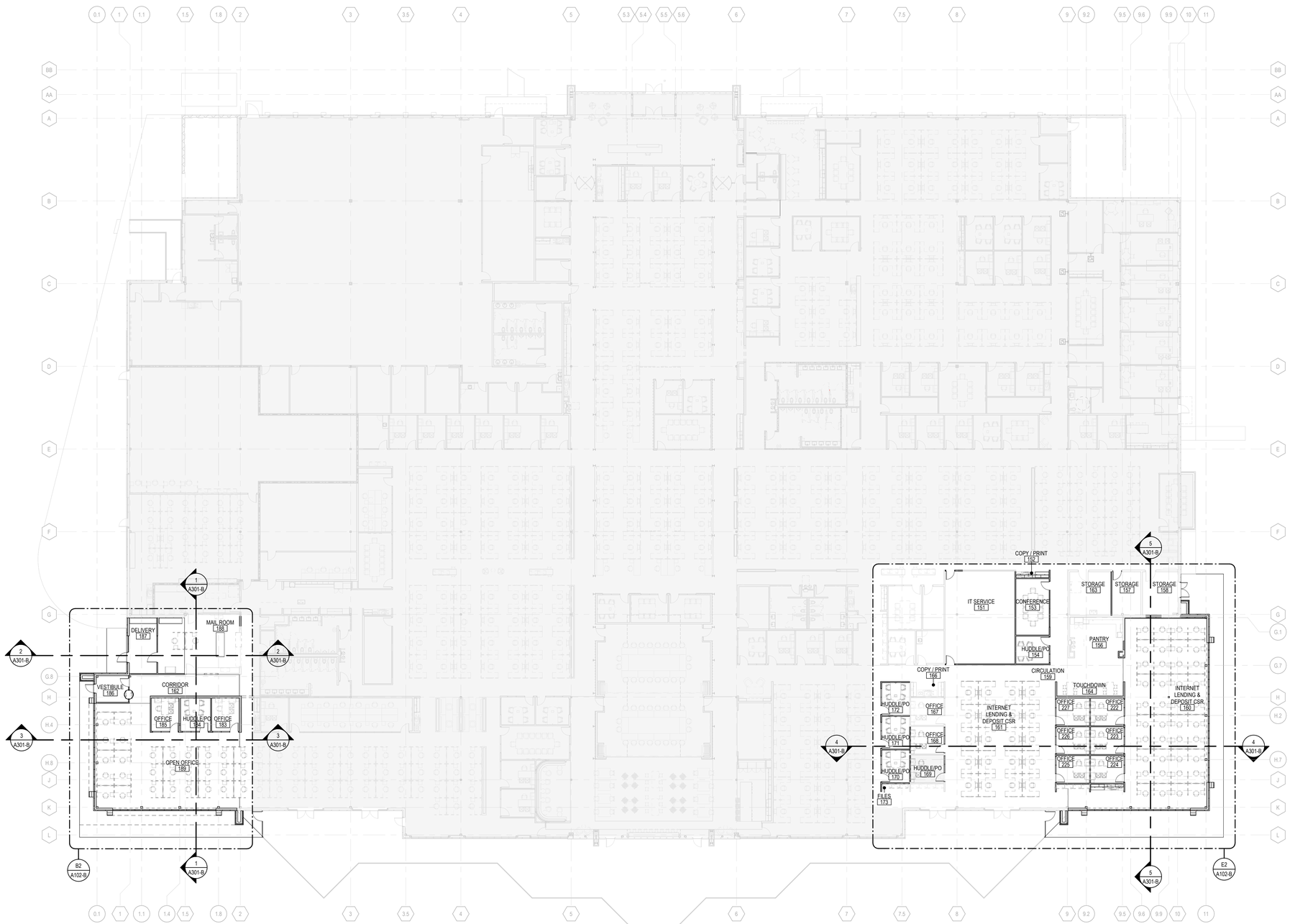


OVERALL FLOOR PLAN
1/16" = 1'-0"

GENERAL NOTES

1. DO NOT SCALE DRAWINGS.
2. FINISH FLOOR ELEVATION = 100' - 0". REFER TO CIVIL DRAWINGS FOR SITE DATUM ELEVATION EQUIVALENT.
3. EXISTING BUILDING CONDITIONS BASED ON OWNER PROVIDED DRAWINGS AND LIMITED FIELD VERIFICATION. VERIFY EXACT CONDITIONS IN FIELD. SHOULD DISCREPANCIES OCCUR, NOTIFY ARCHITECT FOR CLARIFICATIONS.
4. BEGINNING WORK INDICATES THAT THE CONTRACTOR HAS ACCEPTED AND VERIFIED EXISTING CONDITIONS.
5. REFER TO CODE COMPLIANCE DRAWING(S) FOR LOCATIONS OF RATED ASSEMBLIES AND CODE SUMMARY.
6. ABBREVIATIONS, TYPICAL MOUNTING DIMENSIONS, AND ANNOTATION SYMBOLOGY ARE SHOWN ON GENERAL INFORMATION DRAWINGS.
7. WALL DIMENSIONS ARE TO FACE OF MASONRY, FACE OF CONCRETE, FACE OF STUDS, COLUMN CENTERLINE AS SHOWN OR EXISTING CONSTRUCTION UNLESS OTHERWISE NOTED.
8. ALL DIMENSIONS ARE PERPENDICULAR AND PARALLEL, UNLESS NOTED OTHERWISE.
9. PATCH ALL DISTURBED SURFACES WITH MATERIALS TO MATCH ADJACENT SURFACE CONSTRUCTION.
10. PROVIDE APPROVED SMOKE/FIRESTOPPING ASSEMBLIES AT ALL MECHANICAL AND ELECTRICAL PENETRATIONS THROUGH FIRE RATED AND SMOKE RESISTANT PARTITIONS IDENTIFIED ON CODE COMPLIANCE DRAWINGS.
11. OWNER FURNISHED EQUIPMENT IS SHOWN LIGHT DASHED FOR REFERENCE ONLY. REFER TO EQUIPMENT DRAWINGS FOR ADDITIONAL INFORMATION.
12. REFER TO INTERIORS FOR FINISHES INCLUDING WALL PROTECTION ITEMS.
13. REFER TO SPECIFICATION SECTION 10 1400 FOR REQUIRED LOCATIONS OF CODE REQUIRED SIGNAGE.

INTERIOR PARTITION GENERAL NOTES

EXISTING WALL CONSTRUCTION
NEW STUD WALL CONSTRUCTION
NEW MASONRY WALL CONSTRUCTION

1. CONSTRUCT ALL WALLS TIGHT TO DECK ABOVE AND EXTEND INTO DECK FLUTES AND WEBS OF STEEL MEMBERS UNLESS OTHERWISE NOTED.
2. PROVIDE DEFLECTION TRACK AT THE TOP OF ALL INTERIOR NON-BEARING METAL STUD WALLS CAPABLE OF ACCOMMODATING 1" ROOF/FLOOR DEFLECTION. REFER TO DETAIL E4 ON A302-A FOR HEAD OF WALL CONDITION.
3. REFER TO CODE COMPLIANCE PLAN FOR RATED WALL LOCATIONS. FIRE RATED AND SMOKE RESISTANT ASSEMBLIES SHALL BE CONTINUOUS, WITH OTHER PARTITIONS ABUTTING THEM.
4. PROVIDE FIRESTOPPING/ SMOKE SEALANT AT ALL PENETRATIONS THROUGH FIRE RATED AND SMOKE RESISTANT ASSEMBLIES, CORRIDORS, AND FLOORS WITH OCCUPIABLE SPACES ABOVE AND BELOW.
5. PROVIDE ACOUSTICAL SEALANT AT ALL WALLS WITH ACOUSTICAL INSULATION.
6. PROVIDE 5/8" WATER RESISTANT GYPSUM WALLBOARD AT ALL WALLS OF TOILET ROOMS, WALLS RECEIVING TILE, AND WALLS BEHIND AND ADJACENT TO SINKS.
7. PROVIDE 5/8 TILE BACKER AT ALL WALLS OF SHOWER ENCLOSURES.
8. REFER TO STRUCTURAL DRAWINGS FOR MASONRY REINFORCING AND GROUTING.
9. PROVIDE BULLNOSE CONCRETE MASONRY UNITS AT EXPOSED SILLS AND AT ALL INTERIOR EXPOSED VERTICAL CORNERS, INCLUDING WINDOW AND DOOR JAMBS.
10. ALL WALLS ARE TYPE ___ UNLESS NOTED OTHERWISE.

INTERIOR PARTITION TAG LEGEND

CORE MATERIAL
S - STEEL STUDS
W - WOOD STUDS
C - CONCRETE
M - MASONRY
H - CH / SHAFTWALL

ACOUSTICAL INSULATION
PROVIDE ACOUSTICAL INSULATION AT TAGGED LOCATIONS

PARTITION TYPE SUFFIX
REFER TO SCHEDULE BELOW

M12A

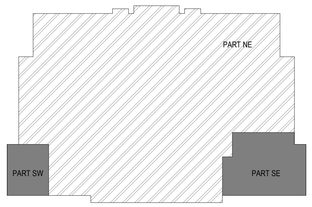
CORE SIZE (NOMINAL)

	S	W	C	M	H
0	7/8"				
1	1 5/8"				
2	2 1/2"	2x (flat)			2 1/2"
3	3 5/8"				
4	4"	2x4		4"	4"
5					
6	6"	2x6	6"	6"	6"
7					
8	8" CFMF	2x8	8"	8"	
9					
10			10"	10"	
11					
12			12"	12"	

INTERIOR PARTITION TYPE SUFFIXES

A	5/8" GYPSUM BOARD ON BOTH SIDES; EXTEND TO DECK (OR HARD CEILING WHERE IT OCCURS)
B	5/8" GYPSUM BOARD ON BOTH SIDES; EXTEND TO 6" ABOVE CEILING (OR HARD CEILING WHERE IT OCCURS)
D	5/8" GYPSUM BOARD ON ROOM SIDE ONLY; EXTEND TO DECK
E	5/8" GYPSUM BOARD ON ROOM SIDE ONLY; EXTEND TO 6" ABOVE CEILING (OR HARD CEILING WHERE IT OCCURS)
T	S3T SAME AS S3A WITH 5/8" FRP PLYWOOD OVER STUDS ON TAGGED SIDE

KEY PLAN



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PROJECT NUMBER
93810001
PROJECT MANAGER
J. HORMAN
PROFESSIONAL

DRAWN BY

CHECKED BY
R. D'ALESSANDRO

OVERALL FLOOR PLAN
A101-B

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A101-B
OVERALL FLOOR PLAN
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EXTERIOR FINISH MATERIALS LEGEND

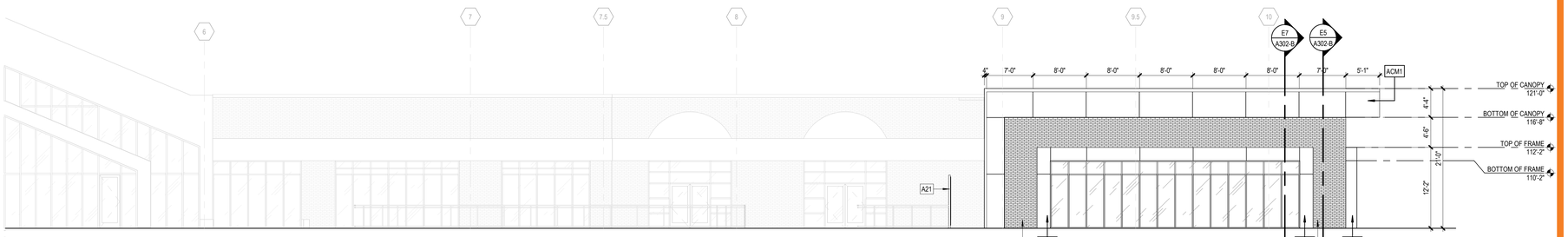
MARK	FINISH MATERIAL	MANUFACTURER	PRODUCT	COLOR	SIZE
ACM1 B.O.D.	ALUMINUM COMPOSITE MATERIAL	MITSUBISHI CHEMICAL COMPOSITES AMERICA, INC	ALPOLIC/PE ACM	BSM MATTE BLACK; LOT#022620 / NONSTOCK	4MM THICK
ACM2 B.O.D.	ALUMINUM COMPOSITE MATERIAL	MITSUBISHI CHEMICAL COMPOSITES AMERICA, INC	ALPOLIC/PE ACM	WLN WALNUT; LOT#072619 / STOCK	4MM THICK
SF1 B.O.D.	EXTERIOR STOREFRONT SYSTEM	OLDCASTLE BUILDING ENVELOPE (OBE)	FG6000	BLACK 378X500	2" X 6"
EP1 B.O.D.	EXTERIOR MASONRY OPAQUE STAIN	SHERWIN WILLIAMS	EXTERIOR	MATCH EP2	

B.O.D. = BASIS OF DESIGN

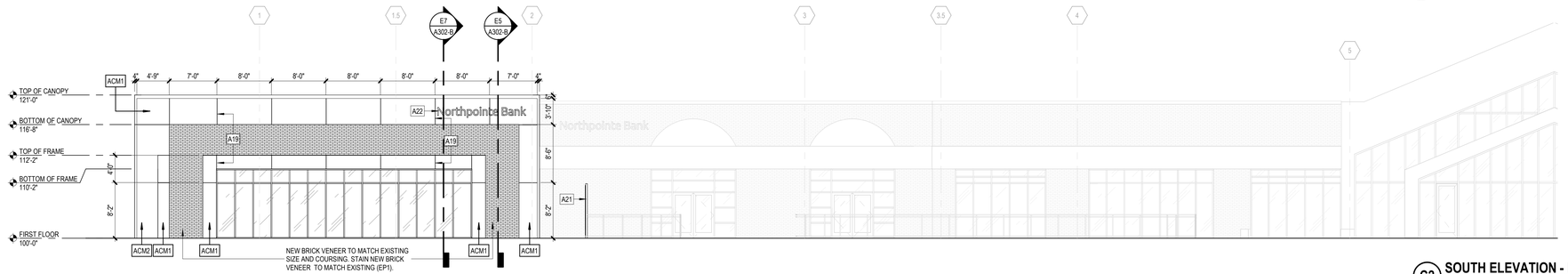
KEYNOTES

NUMBER	NOTE
A19	ALIGN REVEALS WITH MULLIONS TYP.
A21	NEW GATE. SEE CIVIL DRAWINGS FOR SITE PLAN
A22	NEW LOCATION FOR NPB SIGN

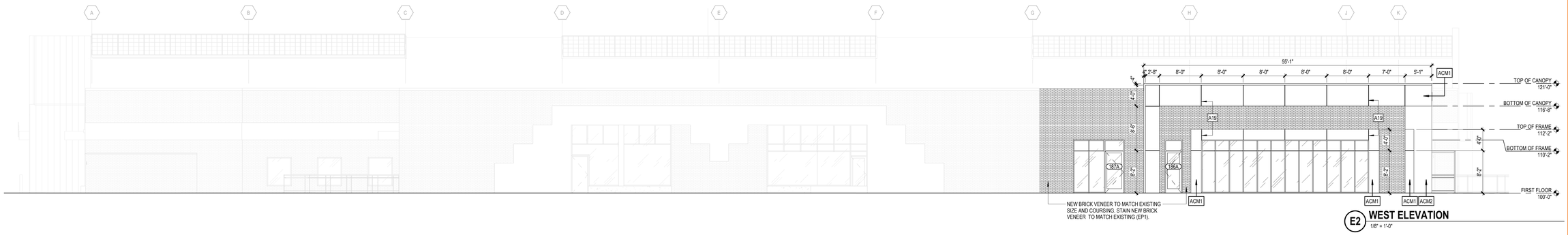
A2 SOUTH ELEVATION
1/16" = 1'-0"



B2 SOUTH ELEVATION - PART A
1/8" = 1'-0"



C2 SOUTH ELEVATION - PART B
1/8" = 1'-0"



E2 WEST ELEVATION
1/8" = 1'-0"

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A201-B
EXTERIOR ELEVATIONS

progressive ae

PROGRESSIVE AE, INC
300 E Mason St | Grand Rapids, MI 49503 | 616.361.2664
330 South Tryon St, Suite 500 | Charlotte, NC 28202 | 704.731.8080 www.progressivenw.com

NORTHPOINTE BANK
NPB OPS CENTER - PHASE 2

5303 28TH ST CT SE
GRAND RAPIDS, MI, 49512

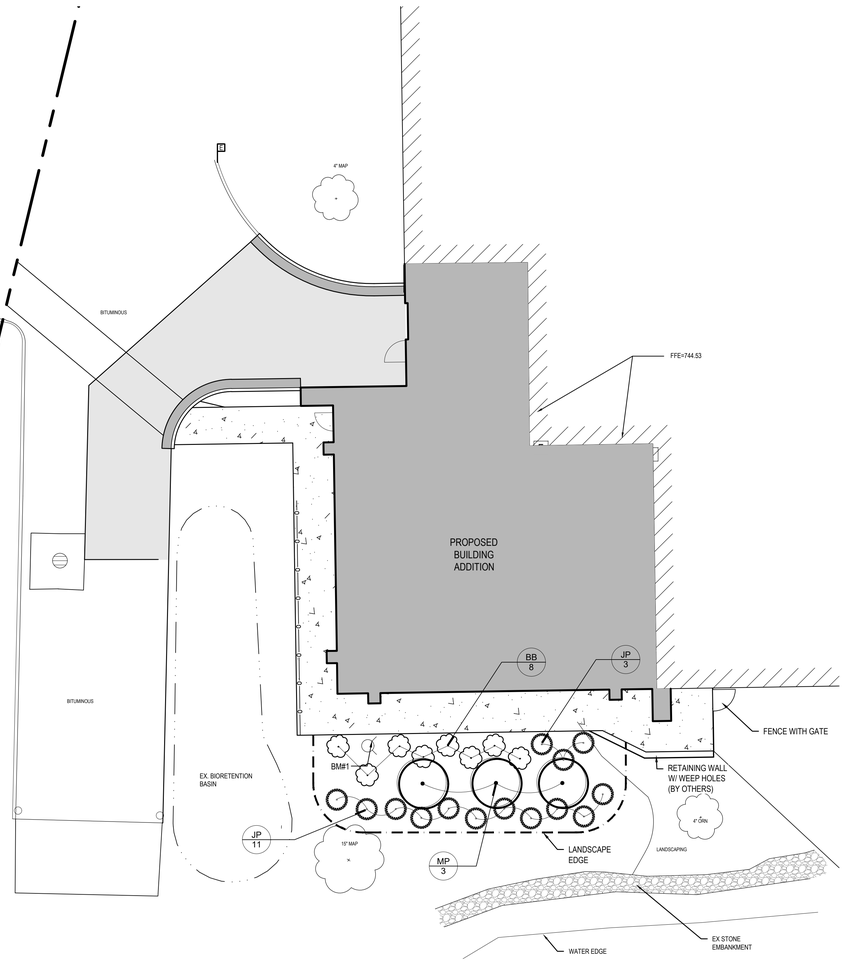
COA ARCHITECT COA ENGINEER

NOT FOR CONSTRUCTION

ISSUANCE
8/26/2022 PUD AMENDMENT SUBMITTAL

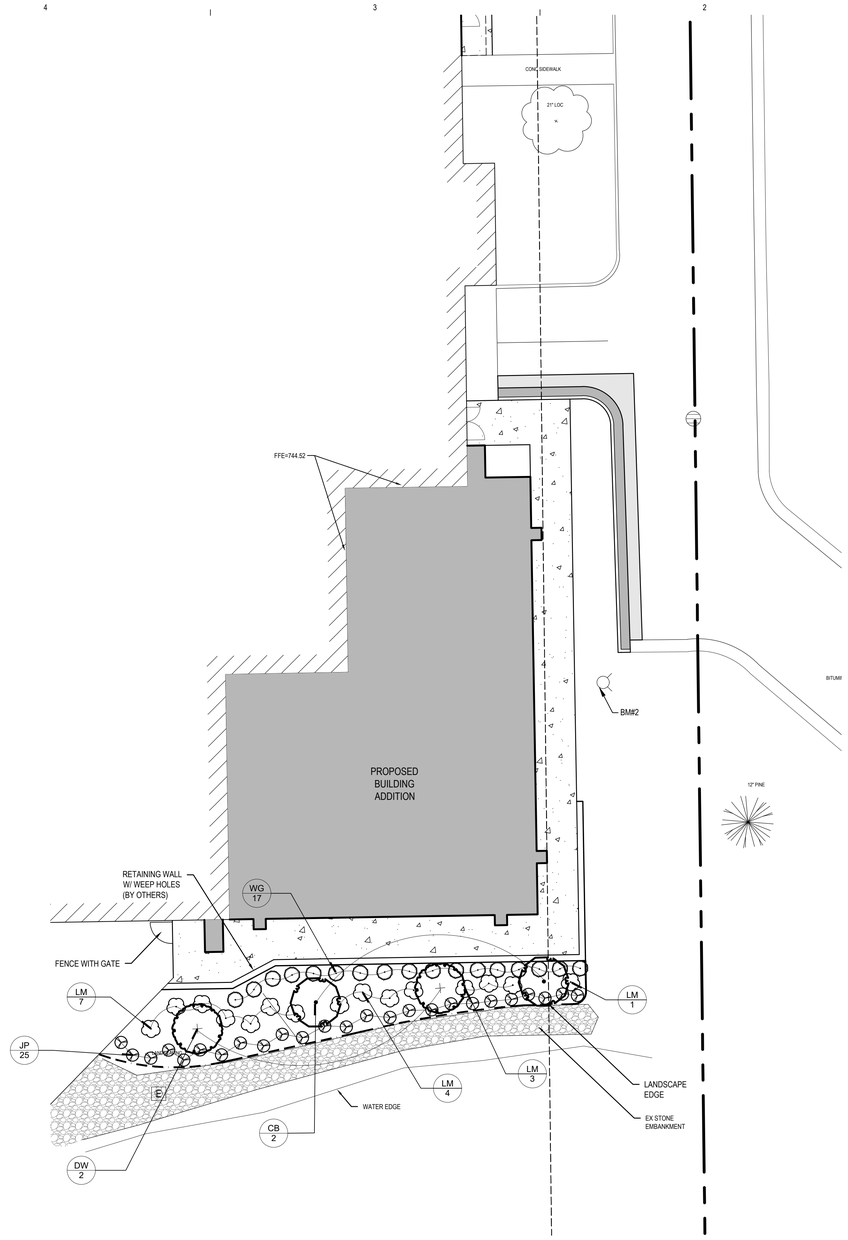
PROJECT NUMBER
93810001
PROJECT MANAGER
J. HORMAN
PROFESSIONAL
DRAWN BY
CHECKED BY
R. D'ALESSANDRO

EXTERIOR ELEVATIONS
A201-B



SW QUADRANT - LANDSCAPE PLAN

NORTH 1"= 10' 0 10'



SE QUADRANT - LANDSCAPE PLAN

NORTH 1"= 10' 0 10'

PLANT_SCHEDULE

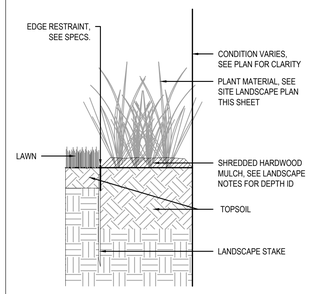
SHRUBS	BOTANICAL / COMMON NAME	QTY	CONT	FT
JP	JUNIPERUS SQUAMATA 'BLUE STAR', BLUE STAR JUNIPER	14	#5	
BB	EUONYMUS ALATUS 'COMPACTUS', DWARF BURNING BUSH	8	#5	

DECIDUOUS TREES	BOTANICAL / COMMON NAME	QTY	CONT	CAL
MP	ACER SACCHARUM, SUGAR MAPLE	3	B & B	2-1/2"

PLANT_SCHEDULE

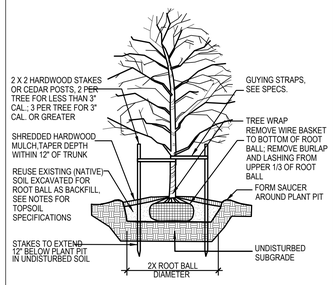
SHRUBS	BOTANICAL / COMMON NAME	QTY	CONT	FT
LM	EUONYMUS ALATUS 'ODOM', LITTLE MOSES BURNING BUSH	15	#5	
WG	WEIGELA FLORIDA, FINE WINE WEIGELA	17	#5	
JP	JUNIPERUS SQUAMATA 'BLUE STAR', BLUE STAR JUNIPER	25	#5	

DECIDUOUS TREES	BOTANICAL / COMMON NAME	QTY	CONT	CAL
CB	MALUS 'PROFUSION', PROFUSION CRABAPPLE	2	B & B	2-1/2"
DW	CORNUS KOUSA, VARIEGATED DOGWOOD	2	B & B	2-1/2"



A1 LANDSCAPE EDGE RESTRAINT

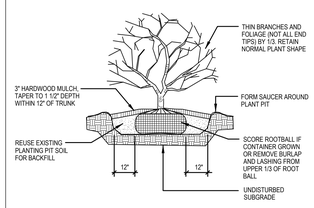
NOT TO SCALE



A2 DECIDUOUS TREE PLANTING DETAIL

NOT TO SCALE

ALL PLANTS TO BE NURSERY GROWN STOCK IN SOIL SIMILAR TO SITE CONDITIONS



A3 SHRUB PLANTING DETAIL

NOT TO SCALE

GENERAL LANDSCAPE NOTES

1. CONTRACTOR RESPONSIBLE FOR UNDERSTANDING PROJECT CONDITIONS AND VERIFYING PLANT QUANTITIES. NOTIFY LANDSCAPE ARCHITECT OF ANY PLAN DISCREPANCIES.
2. PLANT LOCATIONS TO BE STAKED IN THE FIELD FOR REVIEW AND APPROVAL BY LANDSCAPE ARCHITECT AND OWNER.CONTRACTOR WILL BE RESPONSIBLE FOR VERIFYING ALL EXISTING UNDERGROUND UTILITIES. CONTACT THE APPROPRIATE UTILITY COMPANY FOR FIELD STAKING ALL LINES.
3. ALL AREAS DISTURBED BY CONSTRUCTION TO BE TOPSOILED AND SEEDED UNLESS SHOWN OTHERWISE ON PLANS
4. CONTRACTOR TO CONTACT MISS DIG AT PHONE NUMBER 811 AT LEAST 3 WORKING DAYS PRIOR TO CONSTRUCTION, TO CONFIRM LOCATION OF EXISTING UTILITIES.
5. CONTRACTOR TO COORDINATE PLANTING SCHEDULE WITH IRRIGATION CONTRACTOR.
6. NOTIFY LANDSCAPE ARCHITECT IF AREAS OF POOR DRAINAGE OR OTHER UNUSUAL SUB-GRADE CONDITIONS ARE ENCOUNTERED DURING EXCAVATION FOR PLANTING PITS.
7. SHRUB PLANTING BEDS AND TREE SAUCERS TO RECEIVE 3" SHREDDED HARDWOOD MULCH, PERENNIAL BEDS TO RECEIVE 2" DEPTH MULCH AND GROUND COVER AREAS TO RECEIVE 1" DEPTH MULCH.
8. ALL SHRUB BEDS TO HAVE ALUMINUM EDGING AND WEED BARRIER FABRIC.
9. PLANTING MIXTURE FOR PERENNIALS SHALL BE SIX INCH DEPTH OF FOUR PARTS BY VOLUME OF TOPSOIL TO ONE PART OF SPHAGNUM PEAT MOSS.
10. CONTRACTOR SHALL PROVIDE SPECIFIED SHRUBS, GROUND COVERS AND OTHER PLANT MATERIALS THAT COMPLY WITH ALL RECOMMENDATIONS AND REQUIREMENTS OF ANSI Z60.1 "AMERICAN STANDARD FOR NURSERY STOCK". PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS STOCK, GROWN WITH GOOD HORTICULTURAL PRACTICE AND INSTALLED IN ACCORDANCE WITH METHODS ESTABLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
11. NOTIFY LANDSCAPE ARCHITECT AND OWNER (3 DAYS MIN. NOTICE) TO INSPECT AND TAG PLANT MATERIAL IN THE NURSERY PRIOR TO JOBSITE DELIVERY AND INSTALLATION.

progressive ae
1811 4 Mile Rd NE | Grand Rapids, MI 49525 | 616.361.2694
330 South Tryon St, Suite 500 | Charlotte, NC 28202 | 704.731.6080 www.progressiveae.com

NORTHPOINTE BANK
NPB OPS CENTER - PHASE 2
5303 28TH STREET SE, GRAND RAPIDS, MI 49512

COA ARCHITECT COA ENGINEER

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ISSUANCE

03/10/2023 LANDSCAPE PLAN

PROJECT NUMBER
93810001
PROJECT MANAGER
J. HORMAN
PROFESSIONAL
S. TEITSMA
DRAWN BY
J. SHORT
CHECKED BY
C. MARKHAM

LANDSCAPE PLAN
L201

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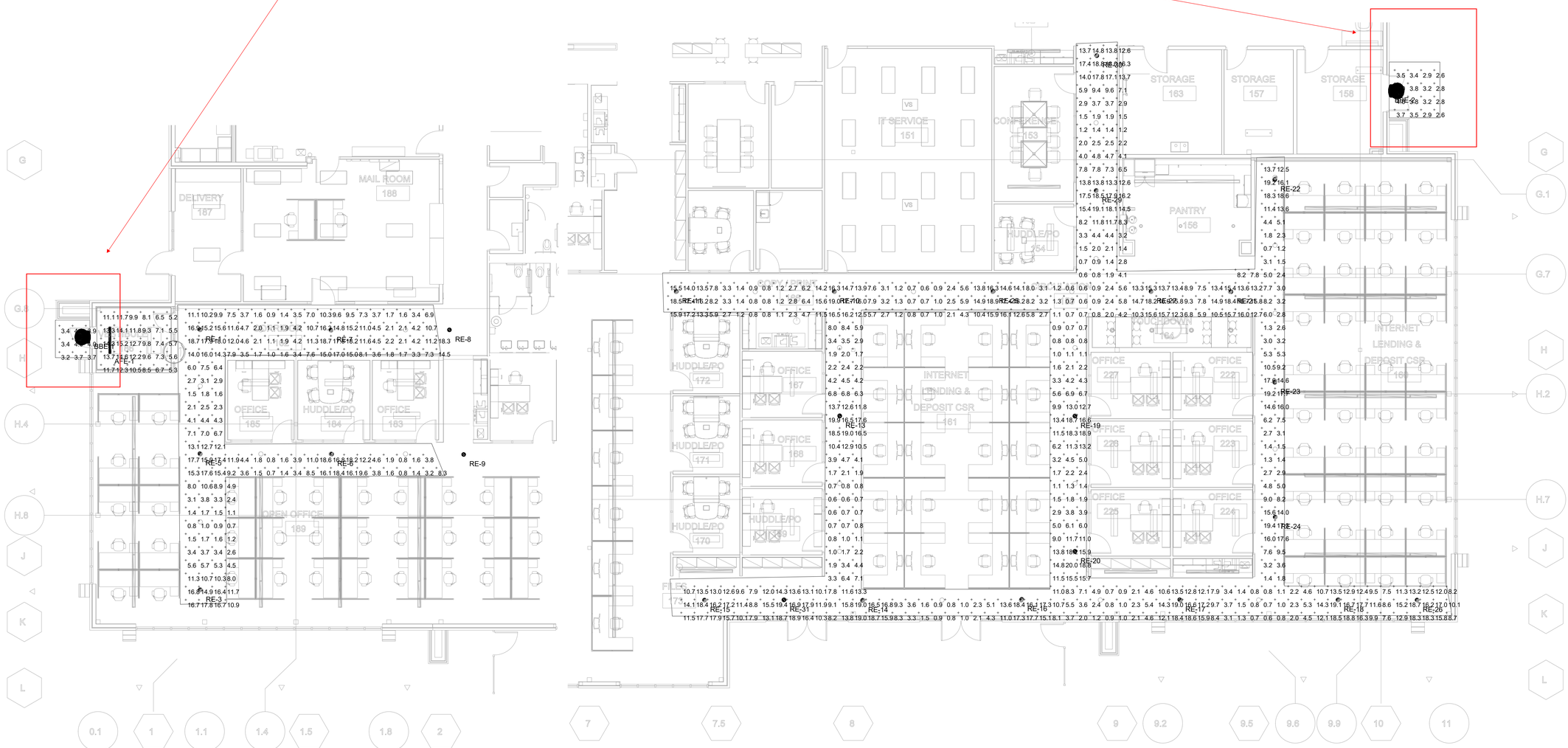
Entry Canopy lighting

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
159 Exit Pathway	+	8.2 fc	20.0 fc	0.6 fc	33.3:1	13.7:1
162 Exit Pathway	+	7.4 fc	18.7 fc	0.7 fc	26.7:1	10.6:1
186 Exterior	+	3.7 fc	4.0 fc	3.2 fc	1.3:1	1.2:1
186 Vestibule	+	9.9 fc	15.2 fc	5.2 fc	2.9:1	1.9:1
158 Exterior	+	3.3 fc	4.0 fc	2.6 fc	1.5:1	1.3:1

Schedule

Symbol	Label	QTY	Manufacturer	Catalog	Description	Number Lamps	Lamp Output	Intensity Multiplier	LLF	Total Output	Input Power
	AFE	1	COLUMBIA LIGHTING	CSL4-4035	tradeSELECT CSL, Striplight 48" x 2.25" led striplight with opal lens	1	4201	1	1	4201	40.24
	BBE	2	Lithonia Lighting	WDGE1 LED P1 40K 80CRI VF	WDGE1 LED WITH P1 - PERFORMANCE PACKAGE, 4000K, 80CRI, VISUAL COMFORT FORWARD OPTIC	1	1227	1	1	1227	10.0002
	RE	27	Lithonia Lighting	LDN6 35/15 LWEAR LSS	6IN LDN WALLWASH, 3500K, 1500LM, CLEAR, SEMI-SPECULAR REFLECTOR	1	1377	1	1	1377	17.06



MORGAN M. LANDON, PE, LLC
2054 Brandon Drive NW
Grand Rapids, Michigan 49504
phone & fax 616-890-9321
morgan@mlandon.com

STATE OF MICHIGAN
MORGAN M. LANDON
ENGINEER
No. 23530
LICENSED PROFESSIONAL ENGINEER

01-10-2023

New Interior Renovation for:

Northpointe Bank Operations Phase 2

5303 28th Street Court SE
Grand Rapids, Michigan 49546

EMERGENCY LIGHTING PLAN
⅛" = 1' - 0"

Date:	Issued for:
12-08-2022	Permits
01-10-2023	Revised Lighting at Exterior Exits

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Holland, Michigan 49423 (269) 751-4182 (f)

Sheet

E401

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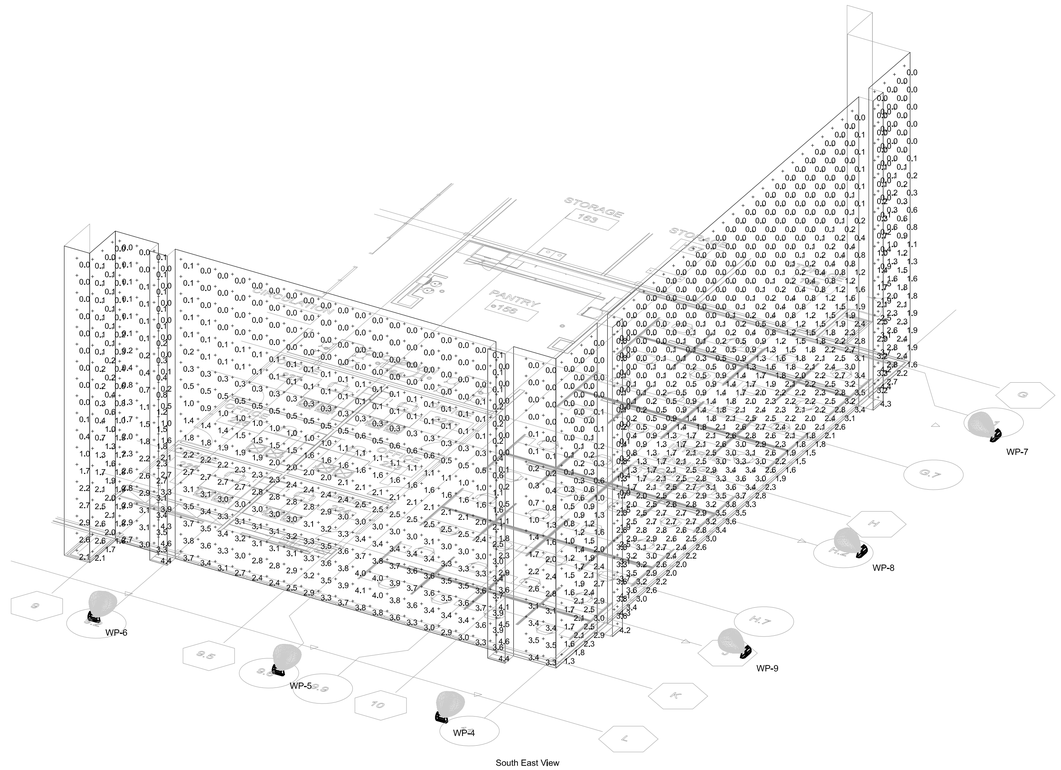
Schedule

Symbol	Label	QTY	Manufacturer	Catalog	Description	Number Lamps	Lamp Output	Intensity Multiplier	LLF	Total Output	Input Power
	WP	6	COOPER LIGHTING SOLUTIONS - LUMARK (FORMERLY EATON)	XTOR2B-FLD-KNC	CROSSTOUR 18W FLOOD LED WITH BRONZE HOUSING AND VISOR	1	Absolute	1	1	Unknown	18.2

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #1	+	0.9 fc	2.6 fc	0.0 fc	N/A	N/A
Calc Zone #1	+	1.3 fc	3.5 fc	0.0 fc	N/A	N/A
Calc Zone #1	+	1.6 fc	4.6 fc	0.0 fc	N/A	N/A
Calc Zone #1	+	1.5 fc	4.1 fc	0.0 fc	N/A	N/A
Calc Zone #1	+	1.7 fc	4.6 fc	0.0 fc	N/A	N/A
Calc Zone #1	+	1.4 fc	3.5 fc	0.0 fc	N/A	N/A
Calc Zone #1	+	1.0 fc	3.0 fc	0.0 fc	N/A	N/A
Calc Zone #1	+	1.5 fc	4.3 fc	0.0 fc	N/A	N/A
Calc Zone #1	+	1.3 fc	3.8 fc	0.0 fc	N/A	N/A
Calc Zone #1	+	1.5 fc	4.4 fc	0.0 fc	N/A	N/A
Calc Zone #1	+	1.1 fc	3.3 fc	0.0 fc	N/A	N/A
Calc Zone #1	+	0.9 fc	2.9 fc	0.0 fc	N/A	N/A



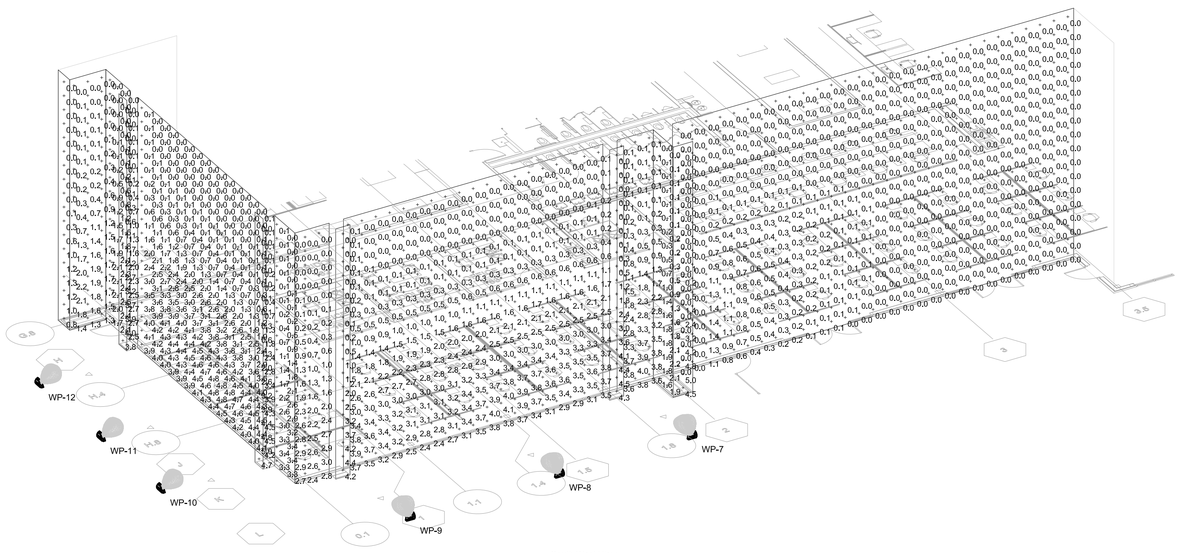
South East View

Schedule

Symbol	Label	QTY	Manufacturer	Catalog	Description	Number Lamps	Lamp Output	Intensity Multiplier	LLF	Total Output	Input Power
	WP	6	COOPER LIGHTING SOLUTIONS - LUMARK (FORMERLY EATON)	XTOR2B-FLD-KNC	CROSSTOUR 18W FLOOD LED WITH BRONZE HOUSING AND VISOR	1	Absolute	1	1	Unknown	18.2

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #1	+	1.5 fc	4.4 fc	0.0 fc	N/A	N/A
Calc Zone #1	+	1.5 fc	4.1 fc	0.0 fc	N/A	N/A
Calc Zone #1	+	1.7 fc	4.5 fc	0.0 fc	N/A	N/A
Calc Zone #1	+	1.6 fc	4.0 fc	0.1 fc	40.0:1	16.0:1
Calc Zone #1	+	0.9 fc	2.2 fc	0.0 fc	N/A	N/A
Calc Zone #1	+	1.5 fc	5.0 fc	0.0 fc	N/A	N/A
Calc Zone #1	+	0.1 fc	1.4 fc	0.0 fc	N/A	N/A
Calc Zone #1	+	0.4 fc	1.3 fc	0.0 fc	N/A	N/A
Calc Zone #1	+	0.8 fc	2.2 fc	0.0 fc	N/A	N/A
Calc Zone #1	+	1.1 fc	2.7 fc	0.0 fc	N/A	N/A
Calc Zone #1	+	1.5 fc	4.0 fc	0.0 fc	N/A	N/A
Calc Zone #1	+	1.9 fc	4.8 fc	0.0 fc	N/A	N/A
Calc Zone #1	+	1.8 fc	5.0 fc	0.0 fc	N/A	N/A
Calc Zone #1	+	1.3 fc	3.4 fc	0.0 fc	N/A	N/A
Calc Zone #1	+	1.1 fc	3.0 fc	0.0 fc	N/A	N/A



South West View

MORGAN M. LANDON, PE, LLC
2054 Brandon Drive NW
Grand Rapids, Michigan 49504
phone & fax 616-890-9321
morgan@mlandon.com

STATE OF MICHIGAN
MORGAN M. LANDON
ENGINEER
No. 23530
LICENSED PROFESSIONAL ENGINEER

04-10-2023

New Interior Renovation for:

Northpointe Bank Operations Phase 2

5303 28th Street Court SE
Grand Rapids, Michigan 49546

EXTERIOR FACADE LIGHTING

NOT TO SCALE

Date:	Issued for:
12-08-2022	Permits
01-10-2023	Revised Lighting at Exterior Exits
04-10-2023	Added E501 for Exterior Facade Lighting Calculations

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Holland, Michigan 49423 (269) 751-4182 (f)

Sheet

E501

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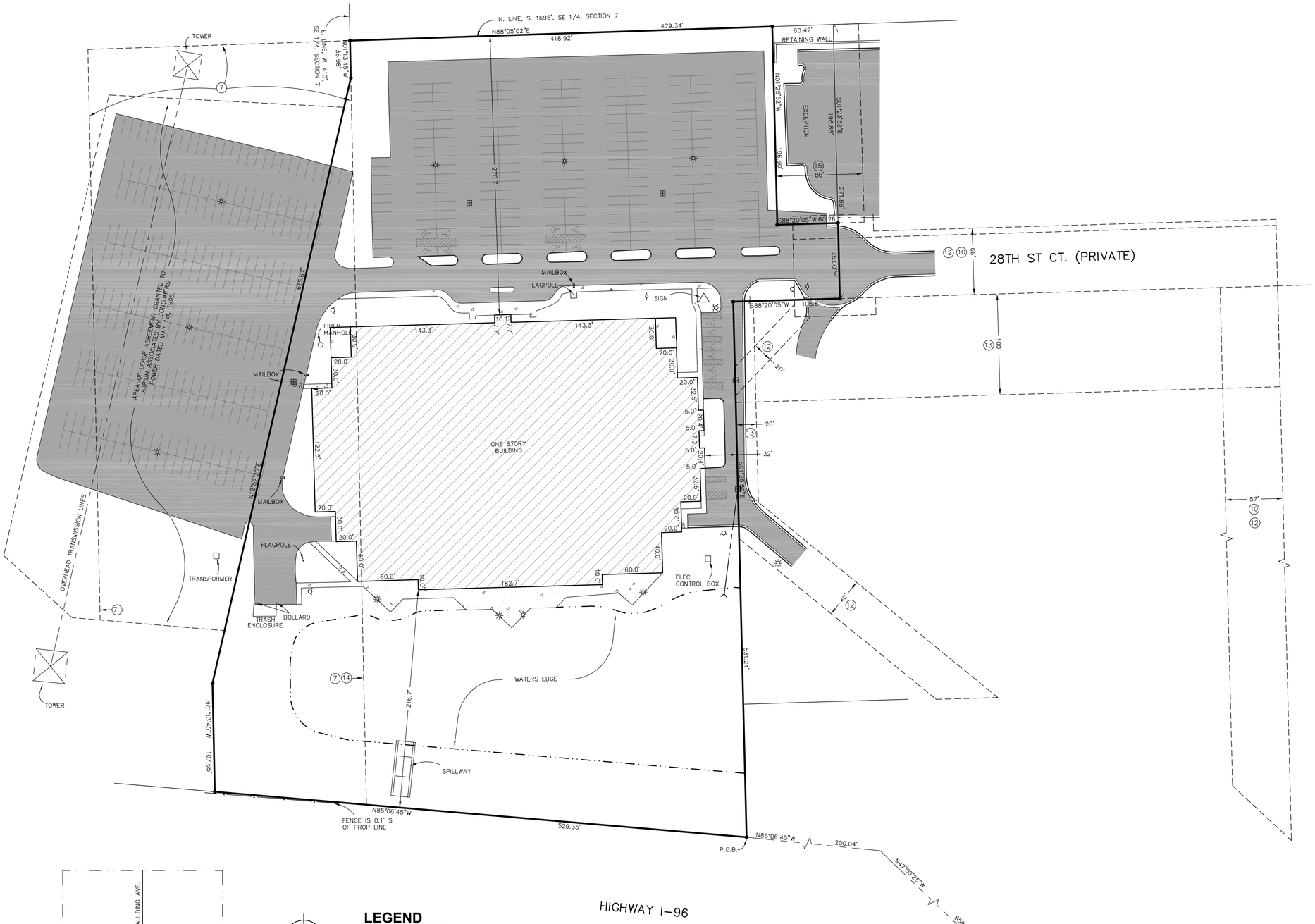


LEGAL DESCRIPTION OF PROPERTY

That part of the Southeast 1/4, Section 7, T6N, R10W, Cascade Township, Kent County, Michigan, described as: Commencing at the Southeast corner of Section 7; thence S88°05'02"W 1054.98 feet along the South line of Section 7; thence N01°39'55"W 262.76 feet to the Northeasterly line of Highway I-96; thence N47°05'25"W 859.39 feet along said Northeasterly line; thence N85°06'45"W 200.04 feet along said Northeasterly line to the Place of Beginning of this description; thence N85°06'45"W 529.35 feet along said Northeasterly line; thence N01°13'45"W 107.65; thence N12°52'20"E 615.67 feet; thence N01°13'45"W 36.98 feet along the East line of the West 410 feet of the Southeast 1/4 of Section 7; thence N88°05'02"E 479.34 feet along the North line of the South 1695 feet of the Southeast 1/4 of Section 7; thence S01°23'52"E 271.86 feet; thence S88°20'05"W 105.81 feet; thence S01°25'52"E 531.24 feet to the Place of Beginning.

EXCEPT: That part of the Southeast 1/4, Section 7, T6N, R10W, Cascade Township, Kent County, Michigan, described as: Commencing at the Southeast corner of Section 7; thence S88°05'02"W 1054.98 feet along the South line of Section 7; thence N01°39'55"W 262.76 feet to the Northeasterly line of Highway I-96; thence N47°05'25"W 382.36 feet along said Northeasterly line; thence N01°25'52"W 888.91 feet along the West line of the East 1/2 of the Southeast 1/4 of Section 7 to the Place of Beginning of this description; thence S88°20'05"W 434.19 feet; thence N01°25'52"W 75.00 feet; thence S88°20'05"W 60.26 feet; thence N01°25'52"W 196.60 feet; thence N88°05'02"E 534.47 feet along the North line of the South 1695 feet of the Southeast 1/4 of Section 7; thence S01°37'57"E 273.93 feet (Deeded as 273.98 feet); thence S88°20'05"W 40.97 feet to the Place of Beginning.

Together with non-exclusive easements as created, limited and defined by those instruments recorded in Liber 2418, Page 938; Liber 2515, Page 301; Liber 2561, Page 1345; Liber 2522, Page 229; Liber 2561, 1354; Kent County Records.

EASEMENTS – SCHEDULE "B"

(7)– Terms and Conditions contained in Warranty Deed as disclosed by instrument recorded in Liber 1744, page 298 (as shown).

(8)– Easement in favor of Michigan Bell Telephone Company and the Covenants, Conditions and Restrictions contained instrument recorded in Liber 1747, Page 101 (over entire property).

(9)– Terms and Conditions contained in Non-Exclusive Easements as disclosed by instrument recorded in Liber 2418, Page 938 (offsite easement, see sheet 2).

(10)– Terms and Conditions contained in Non-Exclusive Easements Agreement as disclosed by instrument recorded in Liber 2515, page 301 (offsite easement, see sheet 2); Liber 2561, page 1345 (offsite easement, see sheet 2) and Liber 2561, page 1354 (as shown).

(11)– Terms and Conditions contained in Non-Exclusive Easements Agreement as disclosed by instrument recorded in Liber 2522, page 229 (offsite easement, see sheet 2).

First Amendment to Non-Exclusive Easements Agreement recorded in Instrument No. 20170207-0011650 (as shown).

(12)– Terms and Conditions contained in Declaration of Easements as disclosed by instrument recorded in Liber 2561, page 1364 (as shown).

(13)– Terms and Conditions contained in Agreement and Easements as disclosed by instrument recorded in Liber 2594, page 30 (as shown).

(14)– Interests of others in the Oil, Gas and other Minerals in and under and that may be produced from captioned land as disclosed by instrument recorded in Liber 2598, page 624 (as shown); Liber 4907, page 630 (not shown, does not affect property); and Instrument No. 20181116-0090584 (not shown, does not affect property).

This exception does not constitute a statement as to the ownership of this interest or right. There may be leases, grants, exceptions or reservations of such interests that are not listed.

(15)– Terms and Conditions contained in Easement Agreement as disclosed by instrument recorded in Instrument No. 20071219-0018823 (as shown).

FLOOD NOTE

By graphic plotting only, this property is in zone "X" of the Flood Insurance Rate Map, Community Panel No. 260814 0025 A, which bears an effective date of 11-6-91 and is not in a special flood hazard area. Zone "X" denotes areas outside of the 500 year flood plain.

NOTES

1. The property contains 8.53 acres.
2. Title work was supplied by First American Title Insurance Company, Commitment No. 861180, dated August 26, 2019.

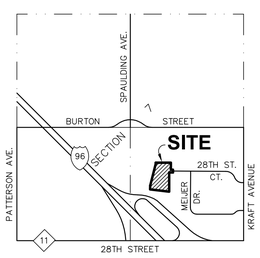
SURVEYOR'S CERTIFICATE

The Undersigned Hereby Certifies to: Northpointe Bank
First American Title Company of MI

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS and includes Items 1, 3, 4, 7a, 8, and 19 of Table A thereof. The field work was completed on September 16, 2019.

Date

Randal D. Feenstra
Registered Surveyor,
State of Michigan
Registration No. 37275



LOCATION MAP
NOT TO SCALE

NORTH

SCALE: 1" = 50'

LEGEND

- ● Found Iron Stake
- ○ Set Iron Stake
- □ Set Wood Stake
- ⊕ Utility Pole
- ✳ Light Pole
- Fence Line
- D = Deeded
- P = Platted
- M = Measured
- Building
- Deck
- Concrete
- Asphalt
- Gravel

STATE OF MICHIGAN
RANDAL D. FEENSTRA
LAND SURVEYOR
NO. 37275
LICENSED LAND SURVEYOR

LEGEND

- = SIGN
- = HYDRANT
- = VALVE
- = CATCH BASIN
- = MANHOLE
- = BURIED CABLE MARKER
- = LIGHT POLE
- x—x—x = FENCE LINE
- = TELEPHONE BOX
- ● = FOUND IRON OR NAIL (AS NOTED)
- ○ = SET IRON OR NAIL (AS NOTED)

REVISIONS

SHEET 1 OF 2

ALTA/NSPS LAND TITLE SURVEY
5303 28TH STREET COURT
PP# 41-19-07-451-013

FOR: Northpointe Bank
3333 Deposit Dr NE
Grand Rapids, MI 49564

PART OF THE SE 1/4, SECTION 7, T6N, R10W,
CASCADE TOWNSHIP, KENT COUNTY, MICHIGAN.

Feenstra & Associates, Inc.
CIVIL ENGINEERS & SURVEYORS
7482 Main Street
Jenison, MI 49428
Phone: 616.457.7050
www.feenstrainc.com

File: 07-06-10
Date: 09/23/19

fishbeck
Engineers | Architects | Scientists | Constructors

1515 Arboretum Drive, SE
Grand Rapids, Michigan 49546

616.575.3824 | fishbeck.com

November 18, 2022
Project No. 170168

Brian Hilbrands
Interim Planning Director
Cascade Charter Township
2865 Thornhills Avenue SE
Grand Rapids, MI 49546

Northpointe Bank Operations Center – 5303 28th St SE
Site Plan Review

Dear Brian:

We have reviewed the Site Plan for the Northpointe Bank expansion, prepared by Progressive AE. The applicant is proposing an expansion of the existing facility consisting of three building additions, a paved entrance drive, and concrete sidewalk access paths.

We received the initial Site Plan for review on October 5th, 2022. We reviewed the Site Plan and provided comments to the engineer. The final stormwater report and Site Plan are dated November 14th, 2022.

Stormwater and Drainage

The proposed project is being reviewed under the updated 2022 Stormwater Ordinance, and the criteria in the Stormwater Standards Manual, revised March 03, 2019.

The project Site is in Flood Control Zone 2. The proposed project is a redevelopment and shall comply with the current standards for the redeveloped portion of the Site.

The Northpointe Bank Site is adjacent to the Hilton Drain drainage detention basin which provides flood control and channel protection for the proposed Site. In addition, a large bioretention area in the southwest quadrant of the project Site will provide water quality treatment, and extended detention.

Flood Control

Flood control is provided by the existing regional detention basin which serves the surrounding area. The additional flood storage required for this project will raise the high-water elevation by 0.03 feet (< 1 inch). Correspondence has been provided from the Kent County Drain Commissioner's office which states they've reviewed this project and that the basin has sufficient capacity.

Channel Protection

The underlying soils of this Site are not conducive to infiltration; therefore, the Site utilizes the extended detention alternate approach to channel protection. Extended detention will be provided through a large bioretention basin in the southwest quadrant of the proposed Site. The difference between the pre- and post-development 2-year, 24-hour runoff volume is 678 cubic feet. The proposed bioretention area has a surface storage volume of 870 cubic feet. The low-flow release is provided by filtration through the bioretention media to a perforated underdrain, which discharges into the regional basin.

Water Quality

Water quality treatment will be performed by the bioretention area as well as the large detention basin.

Drainage Plan

The applicant has submitted plans, calculations, and additional documentation as required in SWO Section 2.03, Drainage Plan. Please note that a maintenance agreement and a long-term maintenance plan are required before construction begins. The agreement should be submitted to the Township for review. The maintenance agreement and plan should include, at a minimum, maintenance two times per year for landscaped BMPs and guidance on indications that issues may exist with the regional basin.

Utilities and General Comments

Sanitary Sewer and Water Services

The Site Plan does not indicate any changes or modifications to the sanitary sewer laterals or water services that currently service the building. It is possible there may be internal plumbing changes or improvements that would require building department review and approval.

Driveways and Sidewalks

The Site Plan indicates there will be modifications to the asphalt paving and concrete approaches to accommodate the new building addition. Because this addition is located on the southern edge of the building no changes to Fire Truck access are required.

Soil Erosion and Sedimentation Control

Soil Erosion and Sedimentation Control (SESC) falls under the review and approval of the Kent County Road Commission (KCRC) and a permit is required before construction can begin.

SESC measures are provided on the plan drawings. The applicant has included silt fence along the edge of the property where earth disturbance is expected to occur. KCRC may require additional SESC measures beyond what is shown on the drawings.

The disturbed area of the Site does not exceed five acres.

Summary

The proposed stormwater management design meets the Township SWO requirements for the Site location. Therefore, from an engineering point of view, we recommend approval.

If you have any questions or require additional information, please contact me at 616.464.3979 or theath@fishbeck.com.

Sincerely,

Anthony Heath, PE
Civil Engineer

Michael L. Berrevoets, PE
Vice President/Senior Civil Engineer

By email

PUD Ordinance - Home Design Center #6 of 1988

ORDINANCE #6 OF 1988

AN ORDINANCE TO AMEND THE CASCADE CHARTER TOWNSHIP ZONING ORDINANCE AND ZONING MAP TO ESTABLISH THE HOME DESIGN CENTER PLANNED UNIT DEVELOPMENT PROJECT

CASCADE CHARTER TOWNSHIP ORDAINS:

SECTION 1. AN AMENDMENT TO THE CASCADE CHARTER TOWNSHIP ZONING ORDINANCE. That the application received from Properties Corporation of America or its assigns (hereinafter referred to as the "Developer") for Planned Unit Development designation for their proposed Home Design Center (hereinafter referred to as the "Premises") was recommended by the Cascade Township Planning Commission for approval on August 15, 1988. The Premises is recommended for rezoning from its former zoning classification thereby requiring this amendment to the Cascade Charter Township Zoning Ordinance and Zoning Map to incorporate the Planning Commission's recommendation and the Cascade Township Board action on August 24, 1988.

SECTION II. LEGAL DESCRIPTION.

The legal description of the Premises is as follows:

That part of the SE 1/4, Section 7, T6N, R10W, Cascade Township, Kent County, Michigan, described as: Commencing at the SE corner of Section 7; thence S 88 degrees 05' 02" W 1054.98 feet along the South line of Section 7; thence N 1 degre4e 39'55" W 262.76 feet to the Northeasterly line of Highway I-96; thence N 47 degrees 5' 25" W 859.39 feet along said Northeasterly line; thence N 85 degrees 06'45" W 200.04 feet along said Northeasterly line to the PLACE OF BEGINNING of this description; thence N 85 degrees 06'45" W 529.35 feet along said Northeasterly line; thence N 1 degree 13' 45" W 107.65 feet; thence N 12 degrees 52'20" E 615.67 feet; thence N 1 degree 13' 45" W 36.08 feet along the East line of the West 410 feet of the SE ¼ of Section 7; thence N 88 degrees 05' 02" E 434.34 feet along the North line of the South 1695 feet of the SE ¼ of Section 7; thence S 1 degree 25' 52" E 271.66 feet; thence S 88 degrees 20' 05" W 60.81 feet; thence S 1 degree 25' 52" E 531.24 feet to the place of beginning. This parcel contains 8.520 Acres.

That part of the SE ¼, Section 7, T6N, R10W, Cascade Township, Kent County, Michigan, described as: Commencing at the SE corner of Section 7; thence S 88 degrees 05' 02" W 1054.98 feet along the South line of Section 7; thence N 1 degree 39' 55" W 262.76 feet to the Northeasterly line of Highway I-96; thence N 47 degrees 05' 25" W 382.36 feet along said Northeasterly line; thence N 1 degree 25' 52" E 888.91 feet along the West line of the East ½ of the SE ¼ of Section 7 to the PLACE OF BEGINNING of this description; thence S 88 degrees 20' 05" W 479.19 feet; thence N 1 degree 25' 52" W 271.66 feet; thence N 88 degrees 05' 02" E 479.21 feet along the North line of the South 1695 feet of the SE ¼ of Section 7;p thence S 1 degree 25' 52" E 273.76 feet along the West line of the NE ¼ of the SE ¼ of Section 7 to the place of beginning. This parcel contains 3.000 Acres.

That part of the Se ¼, Section 7, T6N, R10W, Cascade Township, Kent County, Michigan, described as: Commencing at the SE corner of Section 7, thence S 88 degrees 05' 02" W 1054.98 feet along the South line of Section 7; thence N 1 degree 39' 55" W 262.76 feet to the Northeasterly line of Highway I-96 and the PLACE OF BEGINNING of this description; thence N 47 degrees 05' 25" W 71.24 feet along said Northeasterly line; thence N 88 degrees 20' 05" E 50.75 feet; thence S 1 degree 39' 55" E 50.0 feet to the place of beginning.

That part of the SE ¼, Section 7, T6N, R10W, Cascade Township, Kent County, Michigan, described as: Commencing at the SE corner of Section 7;p thence S 88 degrees 05' 02" W 1054.98 feet along the South line of Section 7; thence N 1 degree 39' 55" W 312.76 feet to the PLACE OF BEGINNING of this description; thence S 88 degrees 20' 05" W 20.0 feet; thence N 1 degree 39' 55" W 74.58 feet; thence N 88 degrees 20' 05" E 20.0 feet; thence S 1 degree 39' 55" E 74.58 feet to the place of beginning.

SECTION III. GENERAL PROVISIONS.

The following provisions shall hereby apply to the aforementioned Premises in addition to those provisions outlined in Section 13.11 of the Cascade4 Charter Township Zoning Ordinance (Ordinance No. 2 of the 1978), as amended through August 28, 1984.

SECTION IV. PERMITTED USES.

The permitted uses for the Home Design Center PUD are as follows:

1. Drapes and Wall Covering stores;

2. Hardware and Paint stores;

3. Floor Covering stores;

4. Household appliance stores;

5. Interior-Home decorator and design professional offices;

6. Art merchandising studios;

7. Furniture stores;

8. One limited service coffee shop designed solely to serve the Premises; and

9. Other uses similar to the above.

SECTION V. DESIGN STANDARDS.

For the purposes of this PUD only one (1) multi-tenant building containing not more than 90,000 square feet shall be permitted. The following Design Standards shall apply within the Home Design Center PUD.

A. Area regulations –

1. The building shall be setback from the street right-of-way a minimum of twenty (20) feet. The setback shall be seeded and maintained as open space.

2. Side setbacks shall in no case be less than twenty-five (25) feet. The rear setback shall in no case be less than one hundred (100) feet. Parking shall be permitted in the side and rear setbacks.

B. Height Regulations – The building shall not exceed the height of forty (40) feet, as measured in accordance with the Cascade Charter Township Zoning Ordinance.

C. Off Street Parking and Loading Areas –

1. All employee and visitor parking shall be provided on-site and not on any streets. Such parking areas may be located in the side or rear yards and shall be surfaced prior to occupancy with bituminous concrete or asphalt. Driveways shall be constructed with materials equal to or better than the requirements established by the Kent County Road Commission.

2. Driveways, parking and loading areas shall have curb and gutter. The curb and gutter installation shall be consistent with the requirements established by the Kent County Road Commission.

3. All off-street parking areas shall be drained so as to prevent drainage onto abutting properties unless there is a common drainage system shared by all the abutting properties.

4. Any lighting fixtures used to illuminated off-street parking shall be so arranged as to reflect the light away from adjacent properties, streets or highways.

D. Parking Requirements –

1. Off-street parking for the Premises shall accommodate 326 vehicles. At least 245 parking spaces shall be paved in accordance with Section V.C. 1 above. All unpaved portions shall be landscaped until such time that it is needed for parking.

2. Each off-street parking space for automobiles shall be a minimum of 180 square feet in area, with a minimum width of nine (9) feet, exclusive of access drives or aisles. There shall be provided a minimum access drive of twenty (20) feet in width, and where a turning radius is necessary, it shall be of such an arc as to reasonably allow an unobstructed flow of vehicles. Parking aisles shall be of sufficient width to allow a minimum turning movement into and out of parking spaces. All parking shall be 90 degree parking with a minimum aisle width of 24 feet.

E. Signs –

1. No signs shall be placed on the Premises except those specifically permitted below:

a. Two (2) wall signs not to exceed fifty (50) square feet each (placed on south side).

b. One (1) off-site shared pole sign (30 feet in height) not to exceed a total of 125 square feet. The shared pole sign may have sides which are constructed in a triangle having 60 degree angles using only two sides for the design message. This sign pylon may be set adjacent to the right-of-way line and may not exceed the height of thirty (30) feet.

c. Two (2) shared off-site ground directional signs not to exceed thirty-two (32) square feet each.

d. One (1) directory sign not to exceed sixty (60) square feet. This sign may have sides which are constructed in a triangle having 60 degree angles, using only two sides for the sign message and may be setback twenty (20) feet from the right-of-way.

e. Two (2) tower development identification signs not to exceed 62.5 square feet each and a height of forty (40) feet.

f. One (1) 32 square foot canopy entrance sign.

g. Traffic safety signs may be installed as needed upon approval of the Planning Director.

2. No billboards, temporary or portable signs, balloon signs, banners, search lights, loudspeakers, amplifiers or similar devices will be permitted in this PUD District. Temporary or portable signs and banner signs may be used for special events or occasions (i.e. grand openings) upon review of the Planning Director.

3. One on-site temporary sign for the purpose of describing the building development, or advertising the sale or lease of a site or building shall be permitted prior to occupancy. The color, character, and wording of the sign shall be prescribed by the Developer. Such signs shall not exceed thirty-two (32) square feet.

4. Signs may be illuminated. However, no intermittent or flashing illumination shall be permitted. The tower development identification signs shall not be internally illuminated.

All signs, unless otherwise provided shall be setback twenty-five (25) feet from the right-of-way or property line.

F. Temporary Buildings –

No structure of a temporary nature; trailer, tent, or construction shack shall be constructed, placed or maintained on the Premises except accessory to and during construction of the building.

G. Landscaping –

1. The Premises shall be landscaped in accordance with plan and specifications approved by the Planning Commission. The entire building site, including curb parkways, shall be appropriately landscaped with grass, canopy and coniferous trees, shrubs, and ground cover. Expansion areas shall be placed in grass and kept weed free. Any areas which become disturbed for any reason shall be restored in accordance with the original landscape plan unless approved otherwise in writing by the Planning Director.

2. Landscaping shall be installed within ninety (90) days of completion of the building or structure, unless permitted in writing by the Planning Director at a later date.

3. All landscaping shall be hardy plant materials and maintained thereafter in a neat and orderly manner. Withered and/or dead plant materials shall be replaced within a reasonable period of time but no longer than one growing season. All new trees used in a landscaped area shall have a minimum diameter of 2-1/2 inches or a height of ten (10) feet, whichever is most appropriated to the specie.

4. Every effort shall be made to retain existing trees. Trees with a diameter of five (5) inches or more shall not be removed without written approval of the Planning Director.

5. Underground sprinkling systems shall be installed where necessary (except the parking area held in reserve) to service landscaped areas and such areas shall be neatly maintained, including mowing, fertilizing and pruning.

6. Parking and loading areas shall be landscaped and/or fenced, as shown on the approved landscape plan, in such a manner as to interrupt or screen said areas from view from access streets.

H. Outside Storage/Display Areas – Outside storage/display areas must be specifically approved by the Planning Director and shall be effectively screened from view as well as kept in a neat and orderly manner. Patio furniture may be displayed on the building patio during the summer season.

SECTION VI. IMPROVEMENTS; PERFORMANCE GUARANTEE.

To insure compliance with this Ordinance and any conditions herein, Cascade Township shall require the Developer to submit a surety bond or irrevocable letter of credit to be determined by the Township Board within 60 days of the effective date of this Ordinance. This surety bond or letter of credit shall be used by the Township to recover expenditures associated with planning and development activities of the Premises, including, but not limited to, the engineering, legal, and infrastructure costs which may become the liability of the Township.

The Township shall not draw upon the surety bond or letter of credit unless Properties Corporation of America fails to promptly reimburse the Township for such billed expenses, within sixty (60) days, following the billing date.

SECTION II. MASTER SITE DEVELOPMENT PLAN.

The Premises shall conform in as much as reasonably possible with the master site development plan approved by the Township Board and signed by the Township Supervisor on August 24, 1988.

SECTION III. EFFECTIVE DATE.

This Ordinance shall become effective upon publication in The Grand Rapids Press, a newspaper of general circulation within the Township of Cascade.

The foregoing Ordinance was offered by Board Member Burlingham, supported by Board Member Carpenter. The roll call vote being as follows:

Yeas: Burlingham, Carpenter, Champion, Hansen and Henning.

Nays: None

Absent: Ellinger and Rowland

Brenda J. Henning

Cascade Charter Township Clerk

CERTIFICATION

I hereby certify the foregoing to be a true copy of an Ordinance adopted at a Regular Meeting of the Cascade Charter Township Board on the 24th day of August, 1988.

Brenda J. Henning

Cascade Charter Township Clerk

PUD Ordinance - Home Design Center #3 of 1993

CASCADE CHARTER TOWNSHIP

Ordinance #3 of 1993

AN ORDINANCE TO AMEND ORDINACNE #6 OF 1988, THE HOME DESIGN CENTER PLANNED UNIT DEVELOPMENT PROJECT.

CASCADE CHARTER TOWNSHIP ORDAINS:

Section 1. Amendments to the Home Design Center PUD Ordinance

Delete Section IV of Ordinance #6 of 1988 as follows:

SECTION IV. PERMITTED USES:

The permitted uses for the Home Design Center PUD are as follows:

1. Drapes and Wall Covering stores;

2. Hardware and Paint stores;

3. Floor Covering stores;

4. Household appliance stores;

5. Interior-Home Decorator and design professional offices;

6. Art Merchandising studios;

7. Furniture stores;

8. One limited service coffee shop designed solely to serve the Premises; and

9. Other uses similar to the above.

Delete Section V.D. 1 of Ordinance #6 of 1988 as follows:

D. Parking Requirements –

1. Off-Street parking for the Premises shall accommodate 326 vehicles. At least 245 parking spaces shall be paved in accordance with Section V.C. 1 above. All unpaved portions shall be landscaped until such time that it is needed for parking.

Add a new Section – Section IV as follows:

1. Personal service establishments which perform services on the premises, such as, but not limited to, repair shops (watches, radios, television, shoes, etc.), tailor shops, beauty parlors or barber shops, photographic studios, self-service laundries, flower shops and print shops.

2. Dry cleaning establishments or pick-up stations, dealing directly with the consumers. Central dry cleaning plants serving more than one retail outlet are prohibited.

3. Business establishments which perform services on the premises, such as, but not limited to, banks, loan companies, insurance offices and real estate offices.

4. Appliance stores.

5. Home improvement centers.

6. Furniture stores.

7. Office machines and computers sales and service.

8. Department stores, excluding sale at wholesale level.

9. Athletic clubs and health spas.

10. Banquet and conference facilities.

11. Business or trade schools.

12. Executive, administrative, and business offices such as, but not limited to, banks, loan companies, insurance, data processing centers, real estate, and non-profit organizations.

13. Professional services, including offices of medical doctors, dentists, osteopaths and similar or allied health care professionals; architects; engineers; accountants; attorneys; and similar professions.

14. Medical and dental laboratories.

15. Emergency medical clinics.

16. Post offices and similar governmental office buildings.

17. Day care facilities.

18. Limited service coffee shops/deli designed to serve the premises.

19. Other uses similar to the uses permitted in this Section.

20. Accessory structures and uses customarily incidental to the uses permitted in this district, subject to the provisions of Section 4.08.

Add a new Section – Section V.D. 1 as follows:

The total number of parking spaces to be required shall be based on the standards set forth in Section 19.11 of the Cascade Charter Township Zoning Ordinance. Initially, 245 parking spaces shall be paved in accordance with Section V.C. 1 above. Thereafter, the Planning Director shall review each new use in combination with all other existing uses on the site to determine the total number of parking spaces required. All additional parking spaces shall be paved unless the Planning Director determines that some of the required paved parking area may be deferred.

Section 2. Effective Date

These PUD Ordinance Amendments shall become effective upon publication in The Grand Rapids Press, a newspaper of general circulation within the Township of Cascade.

The foregoing Ordinance amendments were offered by Board Member Boonenberg, supported by Board Member VanStrien. The roll call vote being as follows:

Yeas: Boonenberg, Carpenter, Henning, Johnson, Julien, VanStrien.

Nays: None

Absent: Hansen

Abstain: None

Brenda J. Henning

Cascade Charter Township Clerk

CERTIFICATION

I hereby certify the foregoing to be a true copy of an Ordinance adopted at a Regular Meeting of the Cascade Charter Township Board on the 24th of March, 1993.

Brenda J. Henning

Cascade Charter Township Clerk

STAFF REPORT

STAFF REPORT:	Case # 23-3756
REPORT DATE:	April 13, 2023
PREPARED FOR:	Cascade Charter Township Planning Commission
MEETING DATE:	April 17, 2023
PREPARED BY:	Brian Hilbrands, Planning Director

APPLICANT
Fleet Quest Logistics, LLC
3056 Eastern Ave, Suite B
Grand Rapids, MI 49508

STATUS OF APPLICANT:	Owner
REQUESTED ACTION:	Type II Special Use Permit for a Trucking Terminal facility
EXISTING ZONING OF SUBJECT PARCEL:	TI, Transitional Industrial
GENERAL LOCATION:	East side of Kraft Ave, between 52nd St and 60th St
PARCEL SIZE:	9.3 Acres
PROPERTY LOCATION:	5610 and 5620 Kraft Ave
EXISTING LAND USE ON THE PARCEL:	Vacant/Existing Home
ADJACENT AREA LAND USES:	N,E – Vacant W – Residential S – Industrial
ZONING ON ADJOINING PARCELS:	N,E – I W – PUD 50 S – TI

STAFF COMMENTS:

1. The applicant is requesting a Type II Special Use Permit to construct a new trucking terminal facility. The facility would include two phases, with a 39,600 square foot building located on a front lot and a 16,000 square foot building located on a back lot.

The site plan was reviewed under Section 21.07 of the Site Plan Review Chapter of the Zoning Ordinance.

2. As a result of the location of the buildings, the property lines of 5610 and 5620 Kraft Avenue will be reconfigured. The result will be one parcel located on the west side with frontage along Kraft Avenue, and a second parcel to the east that will be accessed by an easement. Both parcels meet the size and width requirements of the zoning district.

3. Both buildings will have warehouse and office/lounge space, and the building in Phase 1 will also have a service area. Based on these uses there would be a total of 68 parking spaces required, and the plans show there to be 68 parking spaces provided.

4. The proposed buildings and parking lot meet the setback, height, and bufferyard requirements of the zoning district.

5. Section 13.04a of the zoning ordinance allows a trucking terminal as a special use, so long as the facility is located at least 500 feet from any residential district. There is an ARC zoned parcel to the northwest, so the site plan includes a 500' buffer from that parcel. There is also a home located at 5640 Kraft which is adjacent to the facility, but because that parcel is zoned Transitional Industrial the 500-foot setback does not apply.

6. The proposed curb cut is aligned with the location of Lacks Industrial Drive on the other side of Kraft Ave. The location will need to be approved by the KCRC and a driveway permit will need to be obtained. Grading for the driveway appears to extend onto the neighboring property to the north, so a temporary grading easement will also need to be obtained. The location of the driveway in relation to adjacent driveways meets spacing requirements.

7. A comprehensive landscape plan was submitted that includes new plantings around the building and parking lot, while maintaining a large number of existing trees on the southern and eastern end of the property. The applicant should confirm that the plantings being installed are not listed on the uncredited species list in Chapter 20 of the zoning ordinance. A landscape bond in the amount of no less than $69,000 should be submitted.

8. A photometric plan was submitted that included illumination levels that exceed what is allowed. A revised photometric plan will need to be submitted that meets Township regulations.

9. The Fire and Building Departments have reviewed the plans and did not express any concerns.

10. The Township engineer has reviewed and approved the plan pending submittal of the final geotechnical report, and their comments are included in your packet. A stormwater maintenance agreement will be required.

11. The Gerald R Ford Airport staff has been made aware of the project and provided comments.

12. Detail will need to be added to the site plan to show how the dumpster has an enclosure that meets Township requirements.

13. Section 17.06 as well as 17.07 of the zoning ordinance requires the Planning Commission to review several factors before making a recommendation to the Township Board. I have listed those items for your consideration followed by my comments for each.

Factors	*Comments*
Be designed, constructed, operated and maintained so as to be harmonious and appropriate in appearance with the existing or intended character of the area in which the use is proposed.	The facility is located on an industrial zoned parcel with neighboring industrial uses.
Be adequately served by essential facilities and services such as highways, streets, police and fire protection, drainage, refuse disposal, water and sewer facilities and schools.	This facility would be connected to public sewer and water and is located on a collector street.
Not create excessive additional requirements at public cost for public facilities and services.	This site would not cause excessive additional requirements at the expense of the public.
Not cause traffic congestion, conflict or movement in greater proportion to that normally prevailing for the use in the particular zoning district.	The facility would not create excessive traffic compared to similar uses in the area.
Not involve uses, activities, processes, materials, equipment or conditions of operation that will be detrimental to any persons, property, or the general welfare by reason of noxious or offensive production of noise, smoke, fumes, glare, vibration, odor or traffic.	This is an allowed use in the industrial zoning districts.
…must be situated such that the proposed site has direct primary access on at least one collector or arterial street as classified by the Major Street Plan	The facility would have direct access onto Kraft Avenue which is classified as a collector street.
A minimum lot size of 3 acres.	Both parcels will be at least 4 acres in size.
The minimum setback for use and structures other than employee and customer parking shall be 100 feet from the street right-of-way and 50 feet from side or rear property line.	All uses and structures appear to meet the setback requirements.
A buffer strip shall be required along all property lines.	A bufferyard is provided along all property lines.
Repair of vehicles shall be done within a totally enclosed building.	A portion of the building on Phase 1 is shown as a service area.

The storage of vehicle parts or inoperable vehicles shall be done within an enclosed building.	A portion of the building on Phase 1 is shown as a service area.
Except for visitor parking, operable vehicle parking and storage and all material storage shall be within a fenced area.	The site plan shows a fence enclosing the facility.

Section 21.07: Criteria For Site Plan Approval:

The Planning Commission shall use the following criteria in evaluating a site plan submittal:

1. Whether the required information has been furnished in sufficiently complete and understandable form to allow an accurate description of the proposed use(s) and structure(s) in terms of density, location, area, height, bulk, placement, setbacks, performance characteristics, parking, and traffic circulation.

2. Whether there are ways in which the configuration of uses and structures can be changed which would improve the impact of the development on adjoining and nearby properties, persons, and activities, and on the community, while allowing reasonable use of the property within the scope of district regulations and other regulations of this Ordinance that are applicable to the property and proposed use and structures.

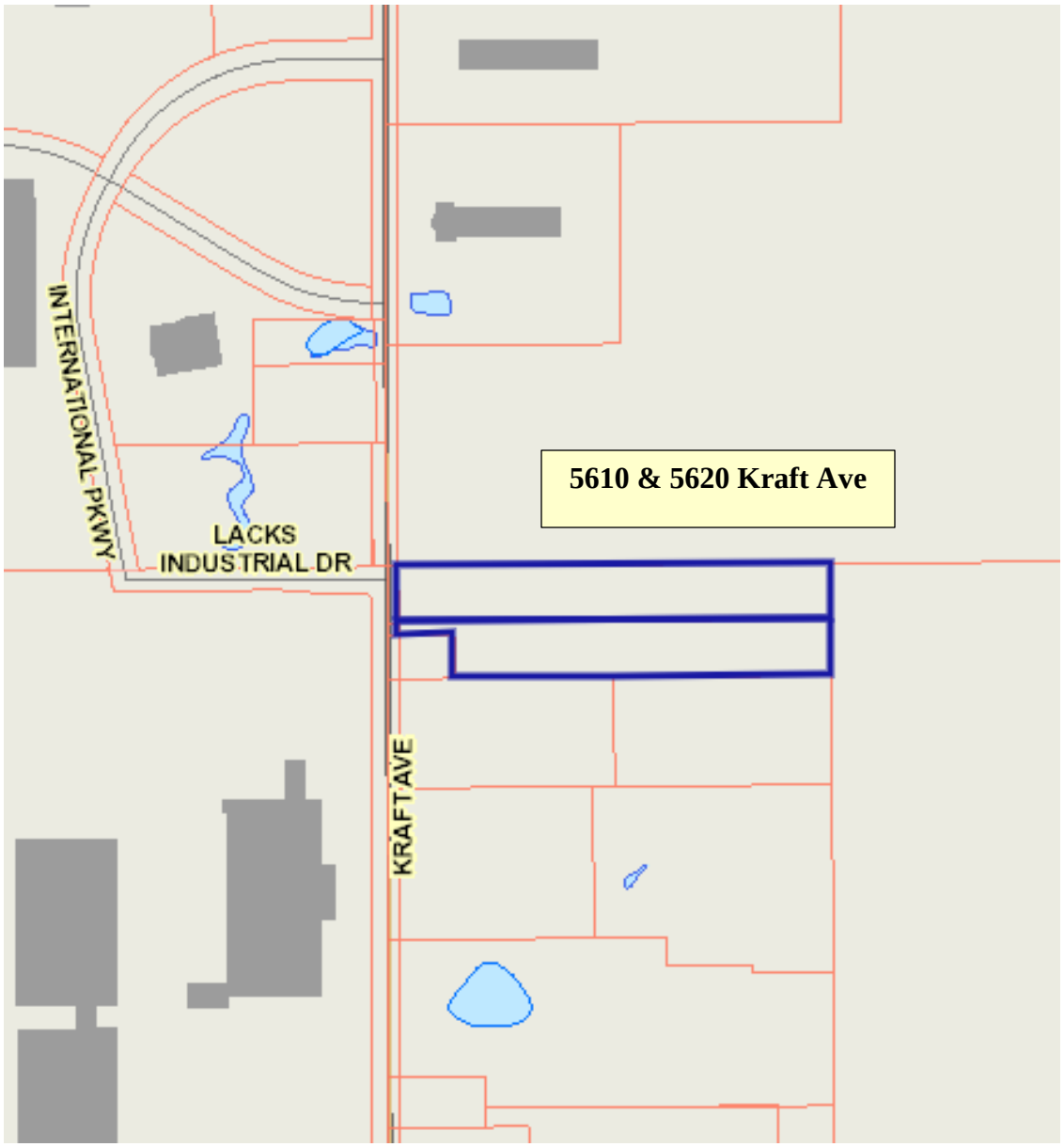
3. The extent to which natural features and characteristics of the large trees, natural groves, watercourses, and similar will be preserved; the regard given to existing natural features that would add attractiveness to the property and environs if they were preserved; the preservation of natural drainage systems the dedication and/or provision, where appropriate, of scenic easements, natural buffering, and other techniques for preservation and enhancement of the physical environment.

STAFF RECOMMENDATION:

A Type II Special Use Permit requires approval from the Township Board. Staff is recommending that the Planning Commission provide a positive recommendation to the Township Board regarding the trucking terminal facility, with the following conditions:

1. The applicant complies with the Township Engineer letter dated April 11, 2023, and all necessary permits are obtained before construction begins.
2. Record the stormwater maintenance agreement.
3. Any work within the right-of-way receives approval from KCRC and a driveway permit is obtained.
4. Receive approval from the neighboring property owner to the north to allow grading work to be done on the property.
5. Provide a landscape bond in the amount of $69,000 and confirm that all species of landscape plantings are acceptable.
6. The applicant applies for a lot line reconfiguration of 5610 and 5620 Kraft Avenue.
7. Provide a revised photometric plan that meets Township regulations.
8. Provide detail on site plan indicating how dumpster enclosure meets Township regulations.
9. The site continues to meet all the special use requirements of Section 17.07(2)(i) of the zoning ordinance.

ATTACHMENTS: Application
Site plan
Township Engineer letter


5610 & 5620 Kraft Ave
INTERNATIONAL PKWY
LACKS
INDUSTRIAL DR
KRAFT AVE

CASCADE CHARTER TOWNSHIP

5920 Tahoe Dr. SE, Grand Rapids,
Michigan 49546-7140

PLANNING & ZONING APPLICATION

APPLICANT:

Name: FLEET QUEST LOGISTICS, LLC

Address: 3056 EASTERN AVE, SUITE B

City & Zip Code GRAND RAPIDS MI 49508

Telephone: 616-706-0685

Email Address: SANEL9@YAHOO.COM

OWNER: * (If different from Applicant)

Name: _____

Address: _____

City & Zip Code: _____

Telephone: _____

Email Address: _____

NATURE OF THE REQUEST: (Please check the appropriate box or boxes)

☐	Administrative Appeal	☐	Administrative Site Plan Review
☐	Deferred Parking	☐	P.U.D. – Rezoning *
☐	P.U.D. – Site Condominium *	☐	Rezoning
☑	Site Plan Review *	☐	Sign Variance Subdivision
☑	Special Use Permit	☐	Plat Review *
☐	Zoning Variance	☐	Other:_____*

**** Requires an initial submission of 5 copies of the completed site plan***

BRIEFLY DESCRIBE YOUR REQUEST:**

_____

_____

_____

(**Use Attachments if Necessary)

-SEE OTHER SIDE-

LEGAL DESCRIPTION OF PROPERTY:**

See site plan

(**Use Attachments if Necessary)

PERMANENT PARCEL (TAX) NUMBER: 41-19 32-300-022 and 41-19-32-300-023

ADDRESS OF PROPERTY: 5610 and 5620 Kraft Ave SE, Grand Rapids, MI 49512

PRESENT USE OF THE PROPERTY: Vacant

NAME(S) & ADDRESS(ES) OF ALL OTHER PERSONS, CORPORATIONS, OR FIRMS HAVING A LEGAL OR EQUITABLE INTEREST IN THE PROPERTY:

Name(s)	**Address(es)**

SIGNATURES

I (we) the undersigned certify that the information contained on this application form and the required documents attached hereto are to the best of my (our) knowledge true and accurate. I (we) also agree to reimburse the Cascade Charter Township for all costs, including consultant costs, to review this request in a timely manner. I (we) understand that these costs may also include administrative reviews which may occur after the Township has taken action on my (our) request.

I (we) the undersigned also acknowledge that the proposed project does not violate any known property restrictions (i.e. plat restrictions, deed restrictions, covenants, etc.)

SANEL FAZLIC
Owner – Print or Type Name
(*If different from Applicant)

* 3/1/23
Owner's Signature & Date
(*If different from Applicant)

SANEL FAZLIC
Applicant – Print or Type Name

3/1/23
Applicant's Signature & Date

PLEASE ATTACH ALL REQUIRED DOCUMENTS NOTED IN THE PROCESS REVIEW SHEET – THANK YOU

Rev. 7/27/21

Know what's **below.**
Call before you dig.

BENCHMARK #1 ELEV. = 791.33
RR SPIKE IN SOUTH SIDE OF POWER POLE LOCATED 86'± NORTHEAST OF SOUTHWEST PROPERTY CORNER (N.A.V.D. 88)

LEGAL DESCRIPTION:
PART OF N 1/4 NW 1/4 SW 1/4 COM AT W 1/4 COR TH S ALONG W SEC LINE 168.31 FT TH E PAR WITH S LINE OF N 1/4 NW 1/4 SW 1/4 TO E LINE OF NW 1/4 SW 1/4 TH N ALONG SD E LINE 167.73 FT TO E&W 1/4 LINE TH W ALONG E&W 1/4 LINE TO BEG * SEC 32 T6N R10W

N 1/4 NW 1/4 SW 1/4 EX S 130 FT OF W 200 FT & EX COM AT W 1/4 COR TH S ALONG W SEC LINE 168.31 FT TH E PAR WITH S LINE OF N 1/4 NW 1/4 SW 1/4 TO E LINE OF NW 1/4 SW 1/4 TH N ALONG SD E LINE 167.73 FT TO E&W 1/4 LINE TH W ALONG E&W 1/4 LINE TO BEG * SEC 32 T6N R10W

FIRM PANEL #: 26081400025A DATED 11/06/1991
INDICATE THAT THE PROJECT AREA AND AREA DIRECTLY ADJACENT ARE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

WETLAND DELINEATION BY LAKESHORE ENVIRONMENTAL, INC. ON 05/24/2022

WETLAND A: NON-REGULATED WETLAND
WETLAND B: REGULATED WETLAND
WETLAND C: NON-REGULATED WETLAND
WETLAND D: NON-REGULATED WETLAND

DEMOLITION NOTES:

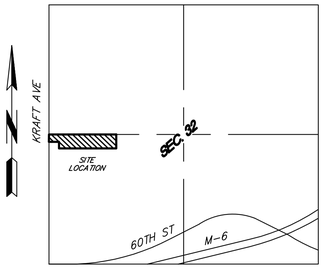
ALL MATERIAL THAT IS NOT SUITABLE AS BACKFILL AND MATERIALS THAT ARE EXCESS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.

ALL AREAS OF UNDERGROUND DEMOLITION; UTILITY LINE REMOVAL; AND UNDERGROUND TREE, STUMP, AND VEGETATION REMOVAL SHALL BE BACKFILLED.

BACKFILLING SHALL PROMPTLY FOLLOW UNDERGROUND DEMOLITION OR REMOVAL WORK AND SHALL CONTINUE AS THE DEMOLITION PROGRESSES.

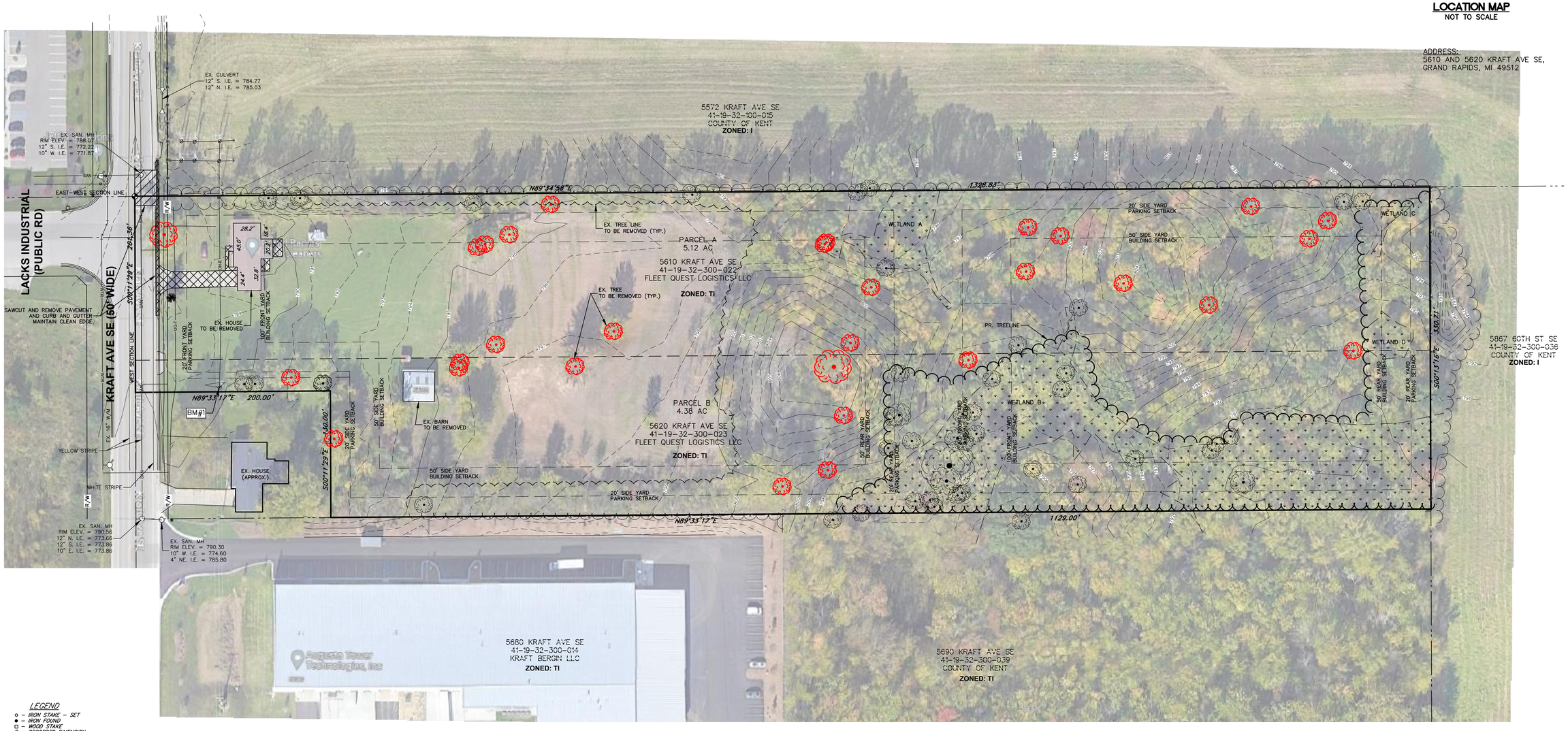
NOTIFY ARCHITECT/ENGINEER OF ANY OTHER UNDERGROUND MATERIALS OR EQUIPMENT ENCOUNTERED DURING EXCAVATION NOT SPECIFICALLY NOTED ON THE DRAWING(S).

WHERE CURBING OR PAVEMENT IS INDICATED TO BE REMOVED, IT SHALL BE SAWCUT FULL DEPTH. REMOVE TO THE NEAREST JOINT, IF THE JOINT IS WITHIN 3 FEET OF THE REMOVAL LINE. VERIFY REMOVAL LIMITS WITH ENGINEER PRIOR TO BEGINNING WORK.



LOCATION MAP
NOT TO SCALE

ADDRESS:
5610 AND 5620 KRAFT AVE SE,
GRAND RAPIDS, MI 49512



LEGEND
- IRON STAKE - SET
- IRON FOUND
- WOOD STAKE
- RECORDED DIMENSION
- DEED DIMENSION
- PLATTED DIMENSION
- MEASURED DIMENSION
- CENTER LINE
- CORNER OF CONCRETE
- EDGE OF BITUMINOUS
- EDGE OF CONCRETE
- EDGE OF GRAVEL
- GROUND ELEVATION
- FLOW LINE OF GUTTER
- OVERHEAD ELEC/UTILITY LINE
- LIGHT POLE
- EX. CONTOUR LINE
- FENCE LINE
- CONCRETE
- BITUMINOUS PAVEMENT
- PROPERTY LINE ENCROACHMENT
- UTILITY
- ELECTRIC
- RETAINING WALL
- PROPERTY LINE
- PAVEMENT
- WATER SERVICE LATERAL
- BENCHMARK
- WATER VALVE
- FIRE HYDRANT
- CATCH BASIN
- MANHOLE

EXISTING LEGEND

SURVEY
- SECTION CORNER
- PROPERTY IRON FOUND
- PROPERTY IRON SET
- BM# BENCHMARK

TREES
- CONIFEROUS TREE
- DECIDUOUS TREE

WATER
- MANHOLE
- VALVE
- HYDRANT

ELECTRICAL
- UTILITY POLE
- GUY WIRE
- LIGHT POLE
- UTILITY RISER/METER

SANITARY SEWER
- MANHOLE

- CONCRETE
- BITUMINOUS
- EXIST. BIT REMOVAL
- EXIST. CONC. REMOVAL
- CENTER LINE
- PROPERTY LINE
- 805 CONTOUR LINE (MAJOR)
- 806 CONTOUR LINE (MINOR)
- FENCE
- EXIST. TREE LINE
- EXIST. TREE LINE REMOVAL
- PROP. TREE LINE
- WTR WATER MAIN
- SAN SANITARY SEWER
- G NATURAL GAS
- UG-T UNDERGROUND TELEPHONE
- UG-E UNDERGROUND ELECTRIC

GRAPHIC SCALE
50' 0 25' 50'
(IN FEET)
1 inch = 50 ft.

STATE OF MICHIGAN
PAUL G. HENDRICKSON
ENGINEER
No. 6201042605
LICENSED PROFESSIONAL ENGINEER

REVISIONS:

DRAWN BY: YS
APPROVED BY: PGH
DATE: FEBRUARY 20, 2023
REVISIONS:
MARCH 6, 2023 – FOR SUBMITTAL
APRIL 10, 2023 – REV. PER TWP.
APRIL 13, 2023 – REV. PER TWP.

SERVING THE NEEDS OF OUR CLIENTS SINCE 1987

Roosien & Associates
SURVEYING AND ENGINEERING
5655 PLAINFIELD AVE. NE
GRAND RAPIDS, MI 49525
TELE. (616) 361-7220

EXIST. CONDITIONS PLAN
FLEET QUEST LOGISTICS
SECTION 32, T6N, R10W
CASCADE TOWNSHIP, KENT COUNTY, MICHIGAN

CLIENT:
FLEET QUEST LOGISTICS
4295 HARALSON CT
GRAND RAPIDS, MI 49546
(616) 706-0685

PROJECT NO.
230059

C–101

NOTES

A) ALL DIMENSIONS SHOWN TO THE CONCRETE CURB AND GUTTER ARE TO THE FACE OF THE CURB UNLESS NOTED OTHERWISE.
B) THE CONCRETE GUTTER PAN IS TO TIP IN THE SAME DIRECTION AS THE ADJACENT PAVEMENT. THE GUTTER PAN IN THE BARRIER FREE SPACES SHALL BE PLACED FLAT.
C) REFER TO ARCHITECTURAL PLANS FOR DETAILS OF CONCRETE DOOR STOOPS, DUMPSTER ENCLOSURE, DETAIL OF BUILDING, AND EXACT BUILDING DIMENSIONS.
D) ALL BARRIER FREE SPACES AND SIDEWALKS SHALL MEET A.D.A. REQUIREMENTS.
E) ALL EXTERIOR LIGHT FIXTURE WILL BE FULL CUT-OFF, DOWNCAST FIXTURES.
F) ALL EXTERIOR LIGHTING SHALL COMPLY WITH THE CASCADE TOWNSHIP LIGHTING ORDINANCE
G) REFER TO PHOTOMETRIC PLAN.

SITE DATA:

SITE:	9.5 ACRES EXCLUDING RIGHT-OF-WAY
ZONED:	TI, TRANSITIONAL INDUSTRIAL
USE:	TRUCK FREIGHT TERMINAL
ADDRESS:	5610 & 5620 KRAFT AVE SE, GRAND RAPIDS, MI 49512
PPN:	41-19-32-300-022 & 41-19-32-300-023

	REQUIRED
MAXIMUM BUILDING HEIGHT:	45'
FRONT BUILDING SETBACK:	100'
SIDE BUILDING SETBACK:	50'
REAR BUILDING SETBACK:	50'

PARKING DATA:

PHASE 1

MIN. REQUIRED PARKING: 42 SPACES
(INDUSTRIAL: 0.67 SPACE PER 1,000 SFT
OFFICE: 3 SPACES PER 1,000 SFT)
(33,200 * 0.67/1,000 + 6,400 * 3/1,000)

PROPOSED PARKING: 43 SPACES
(INCLUDES 2 BARRIER FREE SPACES)

PHASE 2

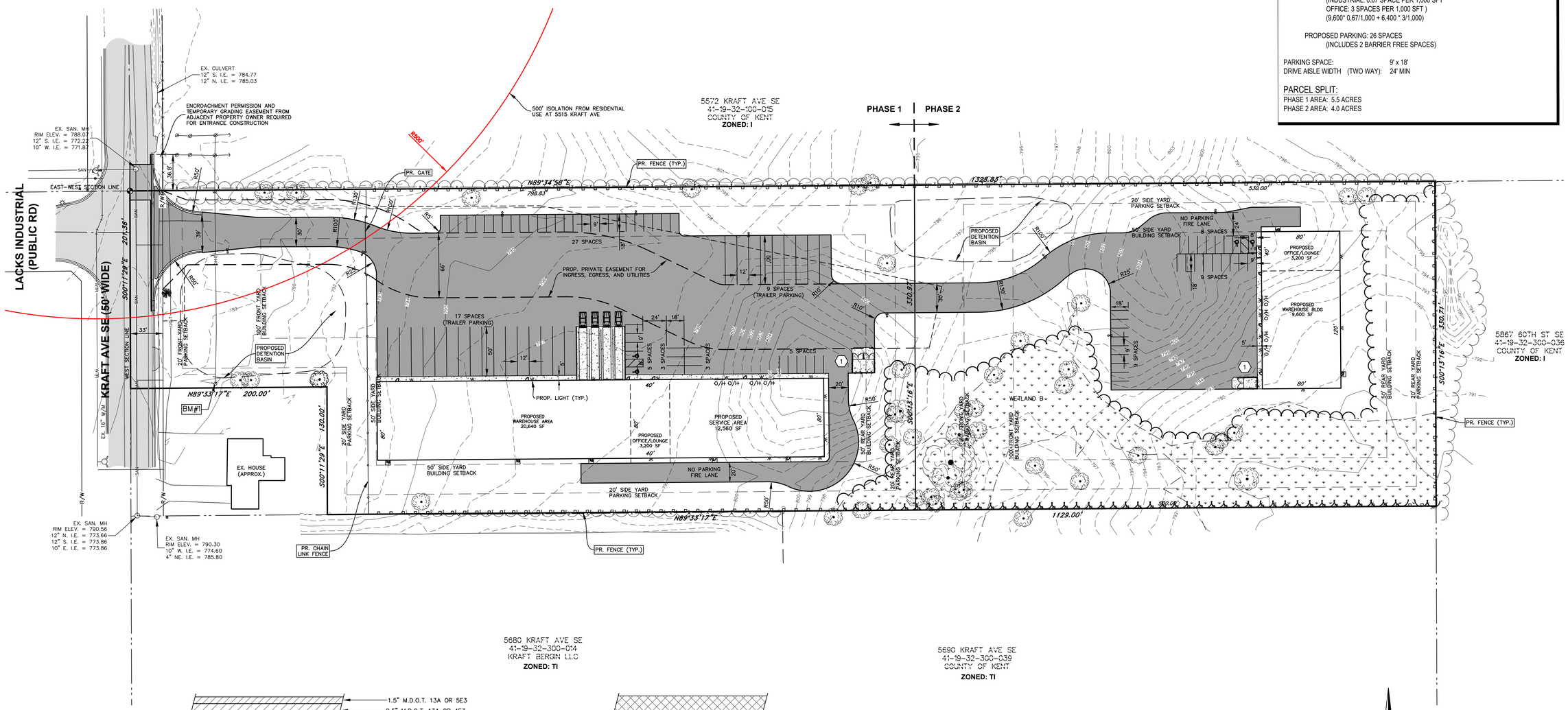
MIN. REQUIRED PARKING: 26 SPACES
(INDUSTRIAL: 0.67 SPACE PER 1,000 SFT
OFFICE: 3 SPACES PER 1,000 SFT)
(9,600* 0.67/1,000 + 6,400 * 3/1,000)

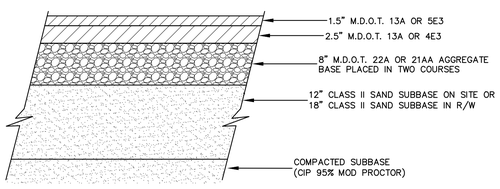
PROPOSED PARKING: 26 SPACES
(INCLUDES 2 BARRIER FREE SPACES)

PARKING SPACE:	9' x 18'
DRIVE AISLE WIDTH (TWO WAY):	24' MIN

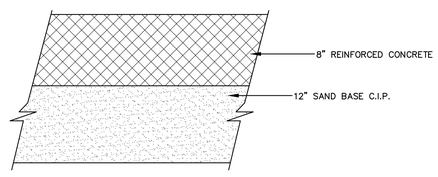
PARCEL SPLIT:

PHASE 1 AREA: 5.5 ACRES
PHASE 2 AREA: 4.0 ACRES





HEAVY DUTY BIT PAVEMENT-SECTION
NOT TO SCALE



HEAVY DUTY CONCRETE PVMT
NOT TO SCALE

SITE PLAN KEY NOTES

(1) DUMPSTER ENCLOSURE (SEE DETAIL)

LEGEND

- 805 — EXISTING MAJOR CONTOUR
- 806 — EXISTING MINOR CONTOUR
- PROPOSED HEAVY DUTY BIT. PAVEMENT
- PROPOSED CONC.
- BUMP BLOCK
- EXTERIOR LIGHTING

GRAPHIC SCALE
50' 0 25' 50'
(IN FEET)
1 inch = 50 ft.

REVISIONS:

DRAWN BY: VS
APPROVED BY: FSH
DATE: FEBRUARY 20, 2023
REVISIONS:
MARCH 6, 2023 – FOR SUBMITTAL
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SERVING THE NEEDS OF OUR CLIENTS SINCE 1987

Roosien & Associates
SURVEYING AND ENGINEERING
5255 PLAINFIELD AVE. NE
GRAND RAPIDS, MI 49525
TELE. (616) 361-7220

SITE LAYOUT PLAN
FLEET QUEST LOGISTICS
SECTION 32, T6N, R10W
CASCADE TOWNSHIP, KENT COUNTY, MICHIGAN

CLIENT:
FLEET QUEST LOGISTICS
4295 HARALSON CT
GRAND RAPIDS, MI 49546
(616) 706-0685

PROJECT NO.
230059

C–102

GENERAL PRIVATE UTILITY NOTES:

PROPOSED PRIVATE UTILITY SERVICE AS SHOWN IS SCHEMATIC ONLY. ACTUAL LOCATION TO BE COORDINATED WITH INDIVIDUAL UTILITY COMPANY AND APPROVED BY OWNER.

CONTRACTOR SHALL COORDINATE LOCATION OF ALL PRIVATE UTILITIES (GAS, ELECTRIC, PHONE, CABLE, ETC.) WITH THE LOCAL UTILITY COMPANIES AND THE MECHANICAL DRAWINGS. COORDINATE ALL PRIVATE UTILITY LOCATIONS WITH ALL SUB-SURFACE SITE UTILITIES SHOWN ON THIS PLAN.

GENERAL STORM SEWER NOTES:

UNLESS NOTED OTHERWISE ON THE PLAN, STORM SEWER PIPE SHALL BE SMOOTH INTERIOR CORRUGATED POLYETHYLENE PIPE PER AASHTO M294 TYPE S. JOINTS SHALL BE WATER TIGHT IN ACCORDANCE WITH ASTM F477.

ROOF DRAIN PIPE OR PIPE INDICATED TO BE PVC SHALL MEET THE REQUIREMENTS OF ASTM D3034, SDR 35. JOINTS TO BE ELASTOMERIC SEALS IN ACCORDANCE WITH ASTM F477.

MATERIALS, INSTALLATION, AND TESTING OF THE STORM SEWER SYSTEM SHALL CONFORM TO CASCADE TOWNSHIP STANDARDS.

GENERAL WATER SERVICE NOTES:

SITE CONTRACTOR TO END WATER SERVICE(S) 12" ABOVE FINISHED FLOOR INSIDE BUILDING WITH A TEMPORARY CAP. COORDINATE CONNECTION WITH BUILDING PLUMBING CONTRACTOR.

IRRIGATION WATER SERVICE TO BE TAPPED OFF WATER SERVICE INSIDE BUILDING UTILITY ROOM. COORDINATE WITH LANDSCAPER AND BUILDING PLUMBER.

WATER MAIN AND FIRE PROTECTION LINE PIPE SHALL BE CLASS 52 DUCTILE IRON PER ANSI/AWWA C151/A21.51, THICKNESS CLASS PER ANSI/AWWA C110/A21.50. FITTINGS SHALL BE DUCTILE IRON PER ANSI/AWWA C153/21.53, PRESSURE CLASS 350.

DOMESTIC SERVICE SHALL BE COPPER, TYPE K, ANNEALED AND SOFT TEMPER PER ASTM B-88. FITTINGS SHALL CONFORM TO ASTM B-88.

MINIMUM COVER OVER PIPE SHALL BE 5.5'.

MATERIALS, INSTALLATION, AND TESTING OF WATER SERVICE LINES SHALL CONFORM TO CASCADE TOWNSHIP STANDARDS AND THE STATE PLUMBING CODE.

THE WATER MAIN IS THE JURISDICTION OF THE CITY OF GRAND RAPIDS AND SUBJECT TO THEIR REVIEW AND APPROVAL.

GENERAL SANITARY SEWER NOTES:

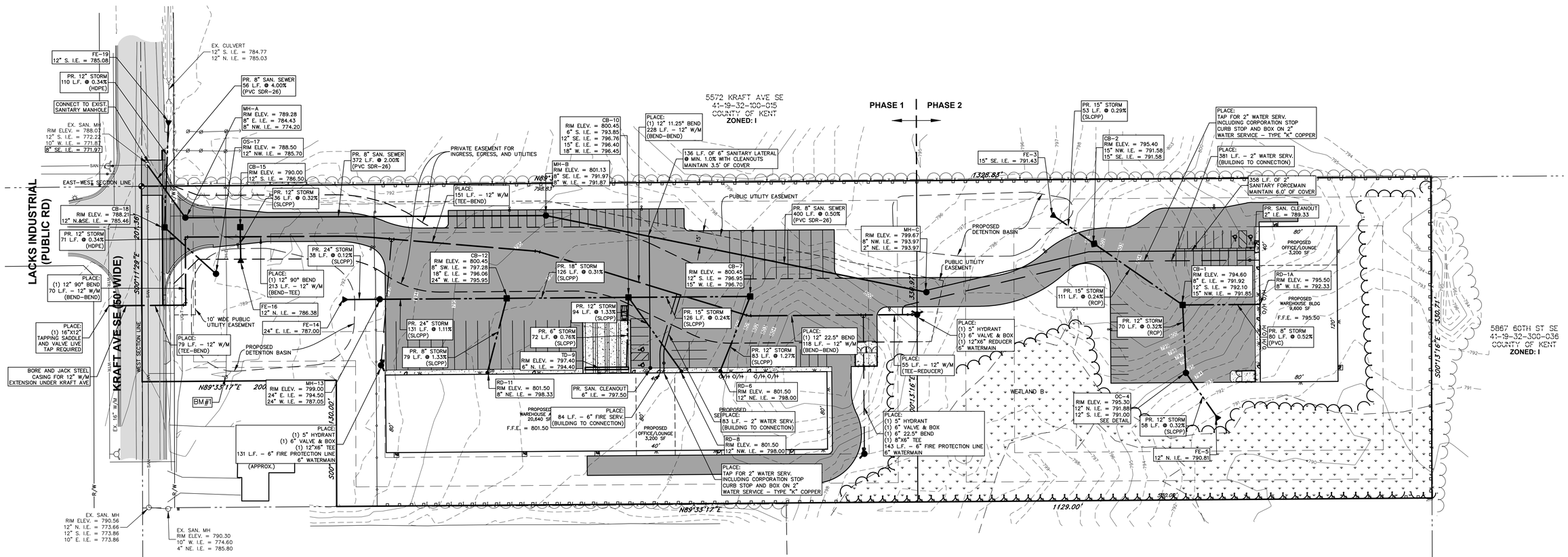
SITE CONTRACTOR TO END SANITARY LATERAL 5' FROM BUILDING WITH A CLEAN-OUT AND TEMPORARY CAP. COORDINATE CONNECTION WITH BUILDING PLUMBING CONTRACTOR.

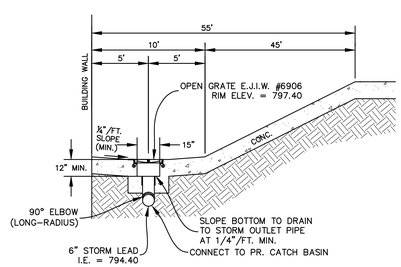
SANITARY SEWER LATERALS AND FITTINGS SHALL BE PVC PER ASTM D3034, SDR 26. JOINTS TO BE ELASTOMERIC SEALS IN ACCORDANCE WITH ASTM D3212.

MATERIALS, INSTALLATION, AND TESTING OF SANITARY SEWER SHALL CONFORM TO THE CASCADE TOWNSHIP STANDARDS.

MINIMUM COVER OVER SANITARY LATERAL SHALL BE 3.5'.

THE SANITARY SEWER IS THE JURISDICTION OF THE CITY OF GRAND RAPIDS AND SUBJECT TO THEIR REVIEW AND APPROVAL.





TRENCH DRAIN DETAIL

NOT TO SCALE

(SEE STRUCTURAL PLANS FOR FINAL CONSTRUCTION DETAIL)

LEGEND

- 805 — EXISTING MAJOR CONTOUR
- 806 — EXISTING MINOR CONTOUR
- PR. HEAVY DUTY BIT. PAVEMENT
- PROPOSED CONC.
- PROPOSED STORM SEWER
- PROPOSED WATER LINE
- PROPOSED SANITARY LINE

GRAPHIC SCALE

50' 0 25' 50'

(IN FEET)

1 inch = 50 ft.

REVISIONS:

DRAWN BY: VS
APPROVED BY: FGH
DATE: FEBRUARY 20, 2023
REVISIONS:
MARCH 6, 2023 - FOR SUBMITTAL
APRIL 10, 2023 - REV. PER TWP.
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SERVING THE NEEDS OF OUR CLIENTS SINCE 1987

Roosien & Associates
SURVEYING AND ENGINEERING
5055 PLAINFIELD AVE. NE
GRAND RAPIDS, MI 49525
TELE. (616) 361-7220

SITE UTILITY PLAN
FLEET QUEST LOGISTICS
SECTION 32, T6N, R10W
CASCADE TOWNSHIP, KENT COUNTY, MICHIGAN

CLIENT:
FLEET QUEST LOGISTICS
4295 HARALSON CT
GRAND RAPIDS, MI 49546
(616) 706-0685

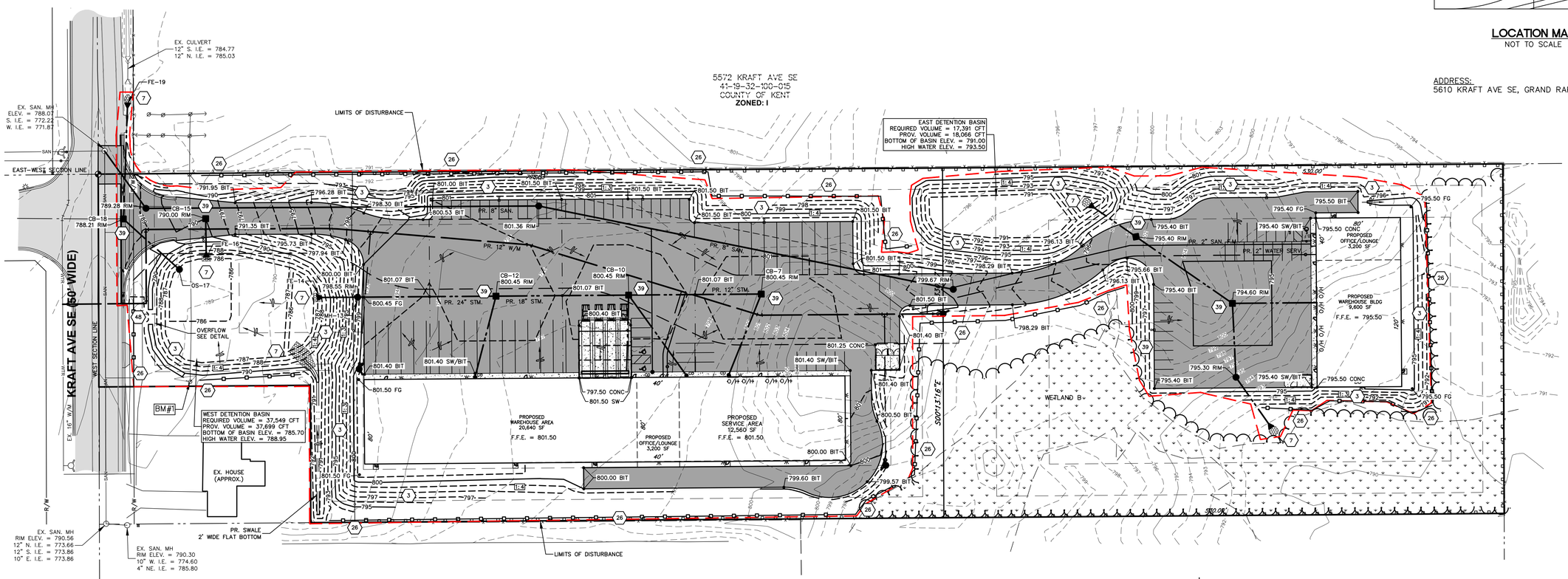
PROJECT NO.
230059

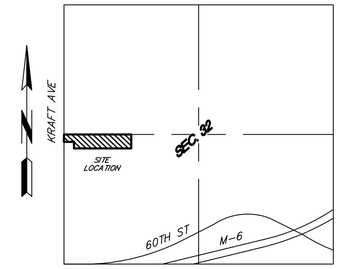
C-103

BENCHMARK #1 ELEV. = 791.33
RR SPIKE IN SOUTH SIDE OF POWER POLE LOCATED 86'± NORTHEAST OF SOUTHWEST PROPERTY CORNER
(N.A.V.D. 88)

LEGAL DESCRIPTION:
PART OF N 1/4 NW 1/4 SW 1/4 COM AT W 1/4 COR TH S ALONG W SEC LINE 168.31 FT TH E PAR WITH S LINE OF N 1/4 NW 1/4 SW 1/4 TO E LINE OF NW 1/4 SW 1/4 TH N ALONG SD E LINE 167.73 FT TO E&W 1/4 LINE TH W ALONG E&W 1/4 LINE TO BEG • SEC 32 T6N R10W

N 1/4 NW 1/4 SW 1/4 EX S 130 FT OF W 200 FT & EX COM AT W 1/4 COR TH S ALONG W SEC LINE 168.31 FT TH E PAR WITH S LINE OF N 1/4 NW 1/4 SW 1/4 TO E LINE OF NW 1/4 SW 1/4 TH N ALONG SD E LINE 167.73 FT TO E&W 1/4 LINE TH W ALONG E&W 1/4 LINE TO BEG • SEC 32 T6N R10W





LOCATION MAP
NOT TO SCALE

ADDRESS:
5610 KRAFT AVE SE, GRAND RAPIDS, MI 49512

GRAPHIC SCALE
50' 0 25' 50'
(IN FEET)
1 inch = 50 ft.

LEGEND

630	EXISTING MAJOR CONTOUR
629	EXISTING MINOR CONTOUR
630	PROPOSED MAJOR CONTOUR
629	PROPOSED MINOR CONTOUR
	GRADE BREAK LINE
	PR. HEAVY DUTY BIT. PAVEMENT
	PROPOSED CONC.
	PROPOSED STORM SEWER
629.00	PROPOSED SPOT ELEVATION
	LIMITS OF DISTURBANCE

STORM WATER MANAGEMENT SYSTEM MAINTENANCE

THE STORM SEWER AND DETENTION SYSTEMS MUST BE INSPECTED AND MAINTAINED ON A REGULAR BASIS FOR OPTIMAL PERFORMANCE. SEE CHART BELOW FOR SUGGESTED INTERVALS.

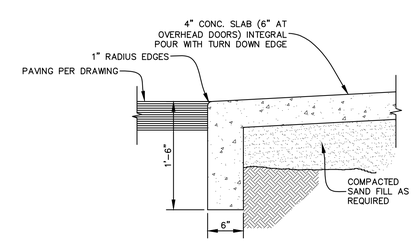
PROPERTY OWNER OR HOME OWNER ASSOCIATION IS RESPONSIBLE FOR MAINTENANCE OF SYSTEM — TASKS / COMPONENTS	BASIN SIDE SLOPES	BASIN BOTTOM	BASIN INLETS	CATCH BASIN INLETS	CATCH BASIN SUMPS	STORM SEWER SYSTEM	SCHEDULE
INSPECT FOR ACCUMULATION		●	●	●	●	●	ANNUALLY
REMOVE SEDIMENT ACCUMULATION		●	●	●	●	●	EVERY 5-10 YEARS AS NEEDED
INSPECT FOR DEBRIS (DEAD VEGETATION AND TRASH)	●	●	●	●	●	●	EARLY SPRING, FALL AND AFTER MAJOR STORMS
CLEAN DEBRIS	●	●	●	●	●	●	AS NEEDED
INSPECT FOR EROSION ON BANKS AND BOTTOM	●	●	●				EARLY SPRING, FALL AND AFTER MAJOR STORMS
REESTABLISH PERMANENT VEGETATION ON ERODED SLOPES	●	●					AS NEEDED
RAKE OUT DEAD VEGETATION			●				ANNUALLY-EARLY SPRING
REPLACE STONE RIP-RAP			●				AS NEEDED
MOWING	●	●					AS NEEDED (MIN. ANNUALLY)

CONSTRUCTION SEQUENCE	2023 MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	REMARKS
INSTALL SILT FENCING AND INLET PROTECTION	■										REQUIRED
CLEAR VEGETATION AND STRIP AND STOCKPILE TOPSOIL		■									
ROUGH GRADE SITE (CONSTRUCT BASIN)			■	■							
CONSTRUCT BUILDING				■	■	■	■	■			
INSTALL UTILITIES				■	■						
INSTALL CURBING AND PAVEMENT						■					
FINISH GRADE, PLACE PLANTINGS, TOPSOIL AND SEED, AND MULCH BLANKETS							■				
CLEAN PAVEMENTS AND STORM SEWER									■		
REMOVE TEMPORARY EROSION CONTROL										■	

SOIL EROSION CONTROL KEY

- (3) PERMANENT/TEMPORARY SEEDING
- (7) RIP RAP
- (26) GEOTEXTILE SILT FENCE
- (39) INLET PROTECTION WITH GEOTEXTILE AND STONE
- (48) SOIL EROSION CONTROL BLANKET (N.A.G. S-150 OR EQUAL)

NOTE:
- REFER TO MDOT SOIL EROSION & SEDIMENTATION CONTROL MANUAL. THE REQUIRED MEASURES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIRED. ADDITIONAL MEASURES MAY BE NECESSARY DUE TO SITE CONDITIONS, WEATHER, OR TIMING.
- CONTRACTOR SHALL PLACE NA-GREEN S-150 (OR APPROVED EQUAL) EROSION CONTROL BLANKET ON ALL SLOPES 1 ON 3 OR STEEPER AND IN THE BOTTOM ONE FOOT OF THE DRAINAGE SWALES.
- THE DETENTION BASIN SHALL BE ONE OF THE FIRST ITEMS CONSTRUCTED, AND SHALL BE CLEANED OUT PRIOR TO OWNER ACCEPTANCE.
- SITE SOILS CONSIST OF LOAM PER USDA NRCS MAPS.
- TOTAL DISTURBED AREA IS 6.4 ACRES.
- THORNAPPLE RIVER IS LOCATED 1.8 MILES TO THE EAST.
- CONTRACTOR SHALL SWEEP THE STREET OF ANY DIRT TRACKED ONTO IT BY THE CONSTRUCTION OPERATION AS NEEDED AND AS DIRECTED BY COUNTY SESC AGENT.



FLUSH SIDEWALK EDGE
NOT TO SCALE

REVISIONS:

DRAWN BY: YS
APPROVED BY: FGH
DATE: FEBRUARY 20, 2023
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MARCH 6, 2023 - FOR SUBMITTAL
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SERVING THE NEEDS OF OUR CLIENTS SINCE 1987

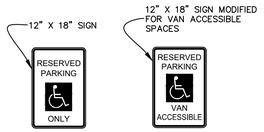
Roosien & Associates
SURVEYING AND ENGINEERING
5655 PLAINFIELD AVE. NE
GRAND RAPIDS, MI 49525
TELE. (616) 361-7220

GRADING AND SESC PLAN
FLEET QUEST LOGISTICS
SECTION 32, T6N, R10W
CASCADE TOWNSHIP, KENT COUNTY, MICHIGAN

CLIENT:
FLEET QUEST LOGISTICS
4295 HARALSON CT
GRAND RAPIDS, MI 49546
(616) 706-0685

PROJECT NO.
230059

C-104



SIGN MATERIALS:

GENERAL: SIGNS SHALL CONFORM WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

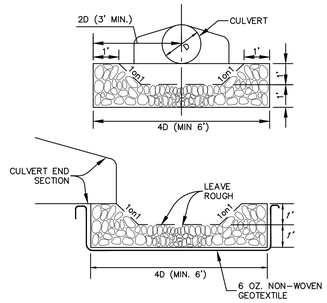
MOUNTING HARDWARE: STAINLESS STEEL.

PANEL MATERIAL: ALUMINUM SHEET.

SIGN FACE: REFLECTORIZED BACKGROUND, REFLECTORIZED LEGEND.

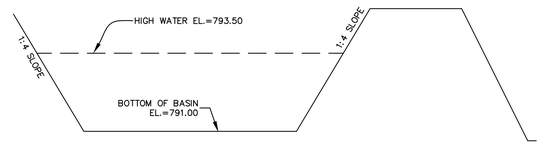
BARRIER FREE SIGNS

NOT TO SCALE



RIPRAP APRON

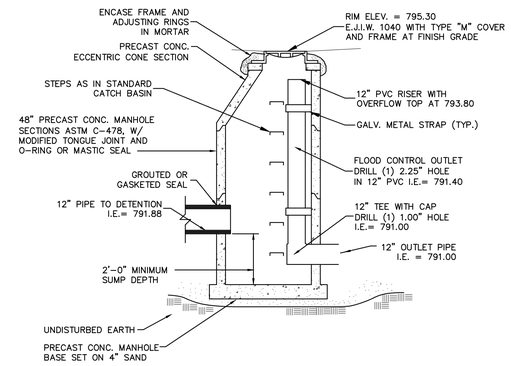
NOT TO SCALE



EAST BASIN CROSS SECTION

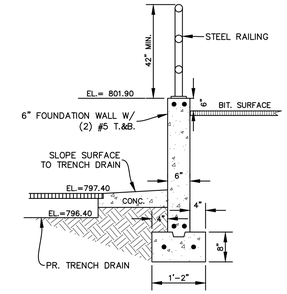
NOT TO SCALE

NOTE: OVERFLOW PROVIDED BY OC-4



OUTLET STRUCTURE (OC - 4)

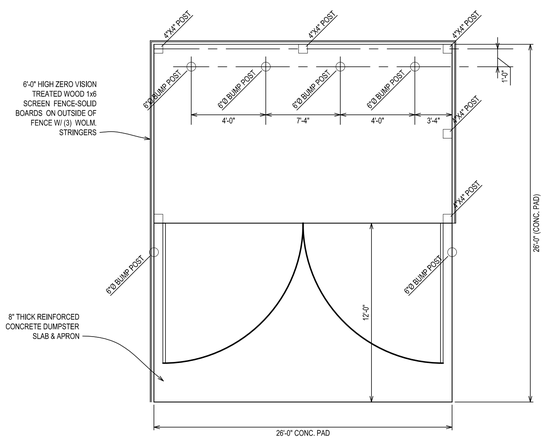
NOT TO SCALE

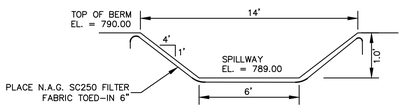


RETAINING WALL SECTION

NOT TO SCALE

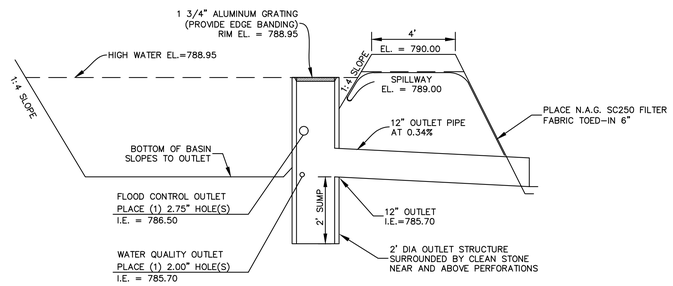
(SEE STRUCTURAL PLANS FOR FINAL CONSTRUCTION DETAIL)





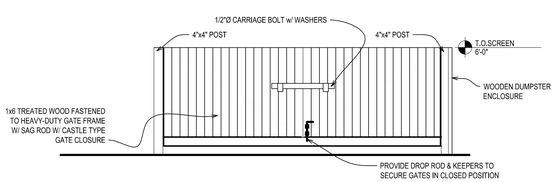
WEST BASIN OVERFLOW SPILLWAY

NOT TO SCALE



WEST BASIN OUTLET STRUCTURE (OS-17)

NOT TO SCALE



DUMPSTER ENCLOSURE ELEVATION/PLAN

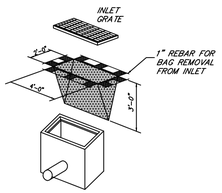
NOT TO SCALE

INLET PROTECTION – FABRIC DROP SPECIFICATIONS (S58)

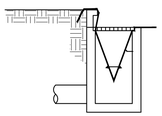
When	• *When sediment laden stormwater requires treatment before entering a stormwater drainage system.*
Why	• *To prevent sediment from entering stormwater systems.*
Where	• *Use in or at stormwater inlets, especially at construction sites or in streets.*
How	*1. A filter fabric bag is hung inside the inlet, beneath the grate.* *2. Replace grate, which will hold bag in place.* *3. Anchor filter bag with 1" rebar for removal from inlet.* *4. Flaps of bag that extend beyond the bag can be buried in soil in earth areas.*
Maintenance	• *Drop inlet filters should be inspected routinely and after each major rain event.* • *Damaged filter bags should be replaced.* • *Clean and/or replace filter bag when 1/2 full.* • *Replace clogged fabric immediately.* • *If needed, initiate repairs immediately upon inspection.* • *Remove entire protective mechanism when upgradient areas are stabilized and streets have been swept.*
Limitations	• *Can only accommodate small flow quantities.* • *Requires frequent maintenance.* • *Ponding may occur around storm drains if filter is clogged.*

MICHIGAN DEPARTMENT OF MANAGEMENT AND BUDGET

INLET PROTECTION – FABRIC DROP (S58)

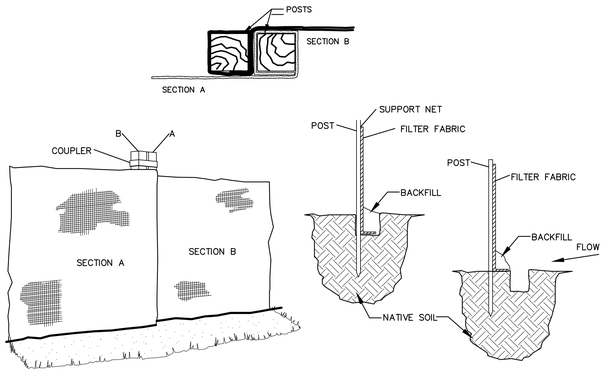


ISOMETRIC VIEW



INSTALLATION DETAIL

MICHIGAN DEPARTMENT OF MANAGEMENT AND BUDGET



JOINING SECTIONS OF ENVIROFENCE

TOE-IN METHODS

FABRIC SILTATION FENCING

NOT TO SCALE

PROJECT NOTES AND SPECIFICATIONS

GENERAL NOTES

A) ALL WORK SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS, CODES, RULES AND REGULATIONS. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED BY STATE AND LOCAL AGENCIES RELATED TO SOIL EROSION AND SEDIMENTATION.

B) ALL ITEMS OF WORK NOT COVERED BY THESE SPECIFICATIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE CASCADE TOWNSHIP SPECIFICATIONS AND IN ACCORDANCE WITH THE LATEST EDITION OF THE STATE OF MICHIGAN DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR CONSTRUCTION. THE MOST STRINGENT REQUIREMENTS AS LISTED IN THE PLANS AND SPECIFICATIONS SHALL APPLY.

C) ALL LOCATIONS OF EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE. EXACT LOCATIONS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR BEFORE BEGINNING CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR CONTACTING MISS DIG AT 811/482-7171 AT LEAST 3 WORKING DAYS PRIOR TO ANY UNDERGROUND CONSTRUCTION.

D) CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER 48 HOURS BEFORE WORK BEGINS.

E) ROOSIEN AND ASSOCIATES AS THE DESIGN PROFESSIONAL SHALL NOT BE RESPONSIBLE OR LIABLE FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THESE DRAWINGS, SPECIFICATIONS AND THE DESIGN INTENT THEY CONVEY, OR FOR PROBLEMS WHICH RISE FROM OTHERS' FAILURE TO OBTAIN AND FOLLOW THE DESIGN PROFESSIONAL'S GUIDANCE WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES OR CONFLICTS WHICH ARE ALLEGED.

F) CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY, CONSTRUCTION MEANS, CONTROLS, TECHNIQUES, SEQUENCES AND PROCEDURES.

GENERAL SPECIFICATIONS

A) ALL CONSTRUCTION AREAS SHALL BE CLEARED OF ALL TREES, BRUSH, WEEDS, ETC. ALL SPOIL MATERIAL IS TO BE DISPOSED OF IN AREAS DESIGNATED BY THE OWNER AND IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS.

B) STRIP ALL TOPSOIL AND ORGANIC MATERIAL ON SITE WITHIN THE CONSTRUCTION LIMITS OF THE PROJECT WHERE GRADES ARE TO BE CHANGED, OR IN AREAS TO BE IMPROVED. IF MATERIAL IS FREE OF ROOTS, ROCKS AND DEBRIS, AND IS APPROVED BY THE ENGINEER, IT SHALL BE TEMPORARILY STOCKPILED ON SITE FOR LATER USE.

C) CONSTRUCTION ACCESS AND MATERIAL STORAGE IS LIMITED TO THE AREAS DESIGNATED ON THE DRAWINGS OR AS APPROVED BY THE OWNER.

D) WHERE IT IS NECESSARY TO WORK OUTSIDE THE PROPERTY CONTROLLED BY THE OWNER, THE CONTRACTOR SHALL OBTAIN LEGAL AUTHORITY FROM ADJACENT PROPERTY OWNERS TO COMPLETE THE WORK AS OUTLINED IN THESE DOCUMENTS.

E) ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE BROUGHT TO FINISH GRADES AS SHOWN ON THE DRAWINGS. ALL AREAS DISTURBED SHALL BE RESTORED WITH A MINIMUM OF 4" OF TOPSOIL, SEEDED AND MULCHED.

F) THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION ON THE NEED FOR IMPORTED OR EXPORTED MATERIAL. THE PROPOSED GRADING PLAN MAY NOT PROVIDE FOR A "BALANCED" SITE.

G) ALL AREAS DISTURBED DUE TO SITE ACCESS SHALL BE RESTORED TO THE PRECONSTRUCTION CONDITION OR BETTER.

H) BACKFILL AND COMPACTION: ALL BACKFILL SHALL BE CLEAN, FREE OF LARGE ROCKS, DEBRIS AND ORGANIC MATERIAL. COMPACT ALL BACKFILL TO 95% OF MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST, ASTM D-1557. BACKFILL SHALL BE PLACED IN A MAXIMUM OF 12" LIFTS UNLESS GEOTECH REPORT HAS MORE STRINGENT REQUIREMENTS.

I) STORM SEWER CATCH BASINS TO BE 4' DIA., UNLESS OTHERWISE NOTED. STORM SEWER INLETS AND OUTLETS TO BE 2' DIA., UNLESS OTHERWISE NOTED. ALL CATCH BASINS AND OUTLET STRUCTURES SHALL HAVE A 2' DEEP SUMP. CATCH BASIN GRATE SHALL BE E.J.I.W. #1040 M1.

J) PERFORATED UNDERDRAIN TO BE SMOOTH LINED CORRUGATED POLYETHYLENE PIPE TYPE S, PER AASHTO M252 AND PRE-WRAPPED WITH A GEOTEXTILE FILTER SOCK. ALL EXPOSED PIPE ENDS SHALL HAVE CONCRETE END SECTIONS INSTALLED.

SITE CONCRETE FLATWORK

A) MATERIALS: READY MIXED CONCRETE: ASTM C94. MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE 3,500 PSI FOR ALL EXTERIOR CONCRETE. 1. SLUMP RANGE: 2 INCHES TO 4 INCHES. 2. AIR CONTENT: 4 PERCENT TO 7 PERCENT. 3. LIMESTONE AGGREGATE SHALL BE USED.

B) CURING MATERIAL: ASTM C171 WHITE, OPAQUE POLYETHYLENE FILM TYPE.

C) EXPANSION JOINT FILLERS: SHALL BE ASTM D1751 PREFORMED, BITUMINOUS FIBER TYPE WITH EXPANSION BOARD CAP AND REMOVABLE TOP CAP SECTION.

D) CONCRETE SEALER: SEALANT TO BE 2-PART URETHANE PAVING SEALANT. SEALANT TO BE POURABLE, CHEMICALLY CURING COMPLYING WITH FS SS-S-200 WITH MINIMUM MOVEMENT CAPABILITY OF 12.5 PERCENT. HYDROZO, ENVIROSEAL 40.

E) CONSTRUCTION JOINTS FLATWORK 1) MAXIMUM DISTANCE BETWEEN EXPANSION JOINTS 100 FEET, UNLESS OTHERWISE SHOWN. SCORE CONTROL JOINTS EQUAL TO THE WIDTH OF THE WALK, OR DRIVE BUT NOT TO EXCEED THE LESSER OF 12 FEET OR 24 TIMES THE THICKNESS. 2) INSTALL EXPANSION JOINT MATERIAL AT ABUTMENT TO CURBS AND ADJACENT STRUCTURES, UNLESS OTHERWISE SHOWN.

F) CONSTRUCTION JOINTS CURBS AND GUTTERS 1) MAXIMUM CONSTRUCTION BETWEEN EXPANSION JOINTS 20 FEET, STRAIGHT CURB 10 FEET.

G) PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH DETAIL SHOWN ON THESE PLANS.

H) PRIOR TO PLACEMENT OF GRAVEL, THE SAND SUBBASE SHALL BE ROLLED TO OBTAIN A MINIMUM OF 95% OF MAXIMUM DENSITY PER THE MODIFIED PROCTOR TEST, ASTMD-1557

I) PRIOR TO PLACEMENT OF ASPHALT, THE GRAVEL SHALL BE PROOF ROLLED AND COMPACTED TO 98% OF MAXIMUM UNIT DENSITY PER THE MODIFIED PROCTOR TEST, ASTMD-1557

STRIPING

A) PARKING LOT STRIPING SHOULD FOLLOW THE BELOW COLOR SCHEDULE.
- PARKING AND STORAGE LOT STALLS SHOULD BE STRIPED IN YELLOW PAINT.
- BARRIER-FREE STALLS SHOULD BE STRIPED IN BLUE PLAINT

B) FOR UNCURED SURFACES USE SETFAST WATERBORNE TRAFFIC MARKING PAINT.

REVISIONS:

DRAWN BY: VS
APPROVED BY: PGH
APPROVED: FEBRUARY 20, 2023
REVISIONS:
MARCH 6, 2023 - FOR SUBMITTAL
MARCH 10, 2023 - REV. PER TWP.
APRIL 13, 2023 - REV. PER TWP.

SERVING THE NEEDS OF OUR CLIENTS SINCE 1987

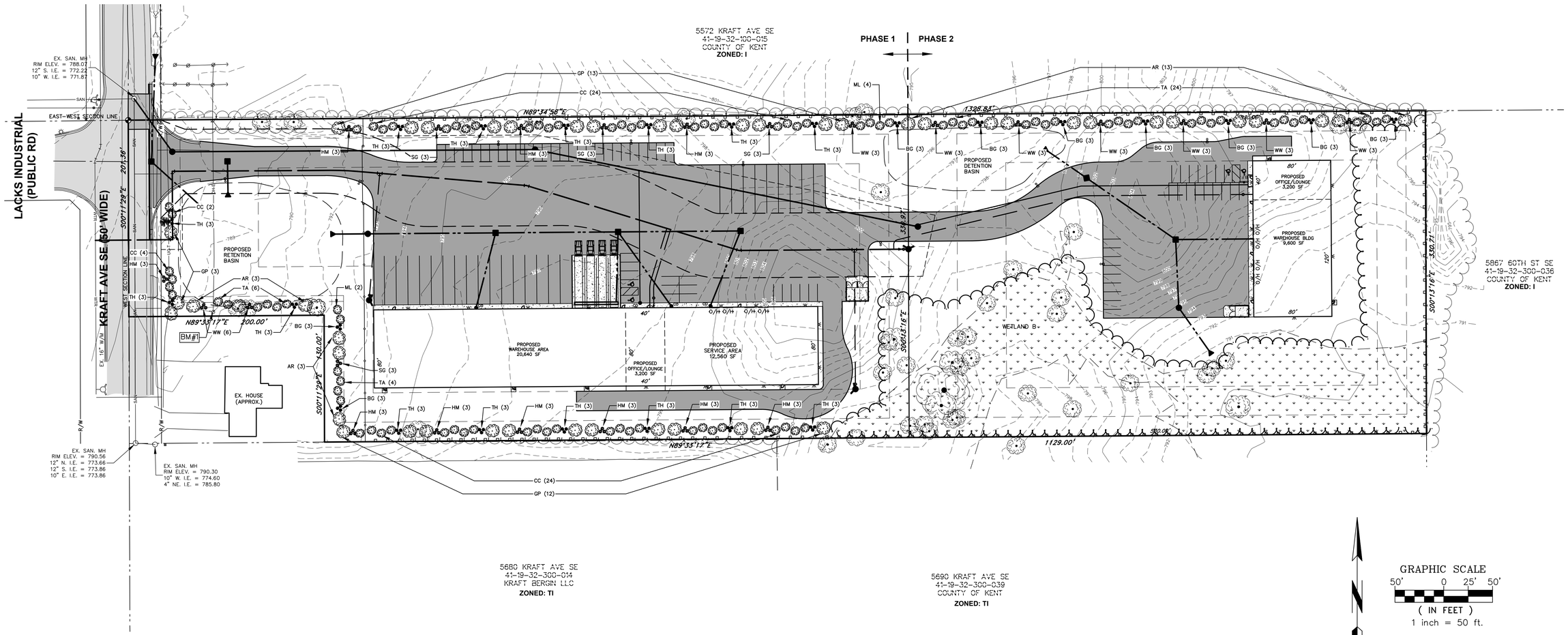
Roosien & Associates
SURVEYING AND ENGINEERING
5655 PLAINFIELD AVE. NE
GRAND RAPIDS, MI 49525 TELE (616) 361-7220

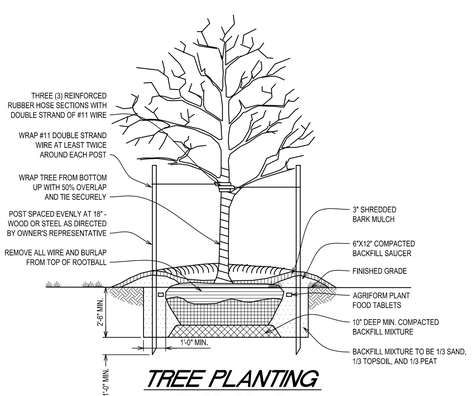
DETAIL PLAN
FLEET QUEST LOGISTICS
SECTION 32, T6N, R10W
CASCADE TOWNSHIP, KENT COUNTY, MICHIGAN

CLIENT:
FLEET QUEST LOGISTICS
4295 HARALSON CT
GRAND RAPIDS, MI 49546
(616) 706-0685

PROJECT NO.
230059

C-501





TREE PLANTING
NOT TO SCALE

NOTES:

1. ALL LANDSCAPING SHALL BE INSTALLED BY A QUALIFIED LANDSCAPE CONTRACTOR TO THE SIZE SPECIFIED ON THE LANDSCAPE PLAN. SMALLER SIZES WILL BE REJECTED.
2. ALL PLANTINGS SHALL BE MULCHED WITH 3" SHREDDED PREMIUM HARDWOOD BARK MULCH. TREES IN LAWN AREAS SHALL RECEIVE A 6' DIAMETER BARK RING 3" DEEP.
3. THE LANDSCAPE CONTRACTOR SHALL REMOVE ANY TWINE THAT IS WRAPPED AROUND THE TRUNK OF A TREE OR SHRUB AS WELL AS TOP THIRD OF ANY BURLAP. REMOVE EXCESS SOIL ON THE TOP OF THE ROOT BALL TO EXPOSE THE ROOT FLARE OR FIRST LAYER OF ROOTS PRIOR TO PLANTING. USE A WIRE CUTTER TO MAKE 35 CUTS IN THE WIRE BASKET TO ALLOW ROOTS TO GROW THROUGH.
4. PLANTING AREAS SHALL BE EDGED WITH A MECHANICAL BED EDGER AT A DEPTH OF 4" TO DEFINE BORDER FOR SHREDDED BARK MULCH.
5. PARKING ISLANDS SHALL BE BACK FILLED WITH AT LEAST 24" OF TOPSOIL. AMEND THE TOPSOIL WITH COMPOSTED MANURE AND MIX INTO THE TOP SOIL AT A DEPTH OF 6-12". ANY AGGREGATE OR STONE FROM THE CONSTRUCTION OF THE PARKING LOT SHALL BE REMOVED PRIOR TO BACKFILL.
6. LAWN AREAS SHALL RECEIVE AT LEAST 4" OF TOPSOIL AND HYDROSEED. CHECK WITH SPECIFICATIONS FOR TOPSOIL AVAILABILITY OR CONTACT PROJECT MANAGER. TOPSOIL FOR LAWNS SHALL BE APPROPRIATE FOR GROWING AND SUSTAINING A HEALTHY LAWN. ALL LAWNS EXCLUDING THE DETENTION BASINS SHALL BE HYDROSEEDED WITH A SEED BLEND CONSISTING OF 30% KENTUCKY BLUEGRASS, 20% PERENNIAL RYEGRASS, 10% HARD FESCUE, 20% CREEPING RED FESCUE AND 20% CHEWINGS FESCUE.
7. MAINTENANCE OF THE LANDSCAPE SHALL BE PROVIDED BY THE OWNER AND INCLUDING FERTILIZING OF LAWN AND PLANT MATERIAL, YEARLY PRUNING, TOP DRESSING OF MULCH AREAS EVERY OTHER YEAR, AND PROVIDE 1" OF WATER PER WEEK DURING THE GROWING SEASON.
8. PLANT MATERIALS SHALL BE CHOSEN AND INSTALLED IN ACCORDANCE WITH STANDARDS RECOMMENDED BY THE COUNTY COOPERATIVE EXTENSION SERVICE OR AMERICAN NURSERY ASSOCIATION.
9. ALL LAWN AND SHRUB BED AREAS SHALL BE WATERED BY AN AUTOMATIC IRRIGATION SYSTEM. THE IRRIGATION SYSTEM SHALL BE DESIGNED AND INSTALLED BY THE LANDSCAPE CONTRACTOR. SHRUB AREAS SHALL BE IRRIGATED WITH DRIP IRRIGATION.
10. PRINCETON SENTRY GINKGO IS A MALE GINKGO CULTIVAR.
11. SCIENTIFIC NAME FOR RED SUNSET MAPLE IS ACER RUBRUM 'FRANKSRED'

REQUIRED LANDSCAPING NOTES:

1. BUFFER YARD:
   A. MIN. 20 FEET WIDE BUFFER YARD IS REQUIRED AND PROVIDED
   B. 2 CANOPY TREES, 4 UNDERSTORY TREES, AND 6 SHRUBS FOR EVERY 100 LFT IS REQUIRED
   C. NORTH PROPERTY IS 1276 LFT* SO 26 CANOPY TREES, 52 UNDERSTORY TREES, AND 77 SHRUBS REQUIRED AND PROVIDED
   D. EAST PROPERTY IS 330.7 LFT* SO 7 CANOPY TREES, 14 UNDERSTORY TREES, AND 20 SHRUBS REQUIRED AND PROVIDED
   E. SOUTH PROPERTY IS 599 LFT* SO 12 CANOPY TREES, 24 UNDERSTORY TREES, AND 36 SHRUBS REQUIRED AND PROVIDED
   F. WEST PROPERTY IS 130 LFT* SO 3 CANOPY TREES, 6 UNDERSTORY TREES, AND 9 SHRUBS REQUIRED AND PROVIDED
   G. 127 LFT OF FRONTAGE EXCLUDING DRIVEWAY AREA* SO 3 CANOPY TREES, 6 UNDERSTORY TREES, 8 SHRUBS REQUIRED AND PROVIDED
   * EXCLUDING DRIVES, CLEAR VISION AREAS, AND SIDEWALK AREAS
2. ALL DISTURBED AREAS TO BE RESTORED WITH TOPSOIL, SEED, AND MULCH
3. ALL REQUIRED LANDSCAPING MATERIALS SHALL CONFORM TO CASCADE TOWNSHIP LANDSCAPING ORDINANCE

PLANT SCHEDULE:

TREES	COMMON NAME	SIZE	CONTAINER	QUANTITY
GP	PRINCETON SENTRY GINKGO	3" CAL.	B&B	28
AR	RED SUNSET MAPLE	3" CAL.	B&B	19
CC	EASTERN REDBUD	2" CAL.	B&B	54
TA	AMERICAN LINDEN	2" CAL.	B&B	36
SHRUBS				
TH	HICKS YEW	24"	POT	45
SG	SPIREA	24"	POT	12
HM	ENDLESS SUMMER HYDRANGEA	24"	POT	30
BG	GREEN VELVET BOXWOOD	24"	POT	27
WW	WINE & ROSES WEIGELA	24"	POT	27

LEGEND

- 805 — EXISTING MAJOR CONTOUR
- 806 — EXISTING MINOR CONTOUR
- PROPOSED HEAVY DUTY BIT. PAVEMENT
- PROPOSED CONC.
- PROPOSE SHRUB
- PROPOSED CANOPY TREE
- PROPOSED UNDERSTORY TREE
- PROPOSED EVERGREEN TREE

REVISIONS:

DRAWN BY: YS
APPROVED: BY: FGH
DATE: FEBRUARY 20, 2023
REVISIONS:
MARCH 6, 2023 - FOR SUBMITTAL
APRIL 10, 2023 - REV. PER TWP.
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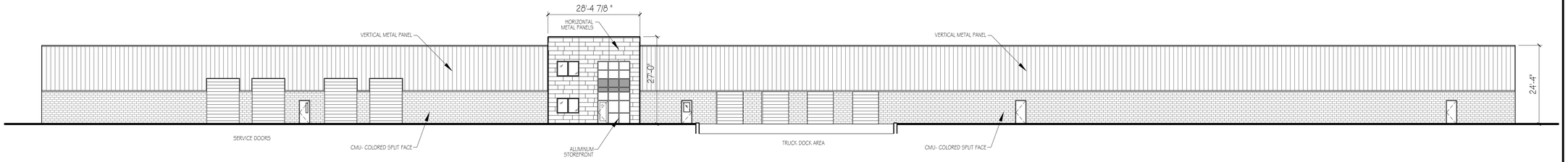
SURVEYING AND ENGINEERING
5055 PLAINFIELD AVE. NE
GRAND RAPIDS, MI 49525 TELE. (616) 361-7220

LANDSCAPE PLAN
FLEET QUEST LOGISTICS
SECTION 32, T6N, R10W
CASCADE TOWNSHIP, KENT COUNTY, MICHIGAN

CLIENT:
FLEET QUEST LOGISTICS
4295 HARALSON CT
GRAND RAPIDS, MI 49546
(616) 706-0685

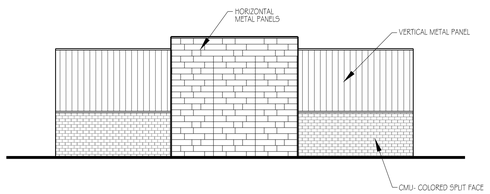
PROJECT NO. 230059

L-101



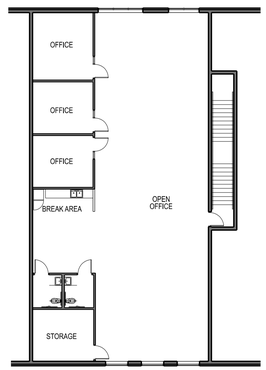
North Elevation

Scale: 1/16" = 1'-0"



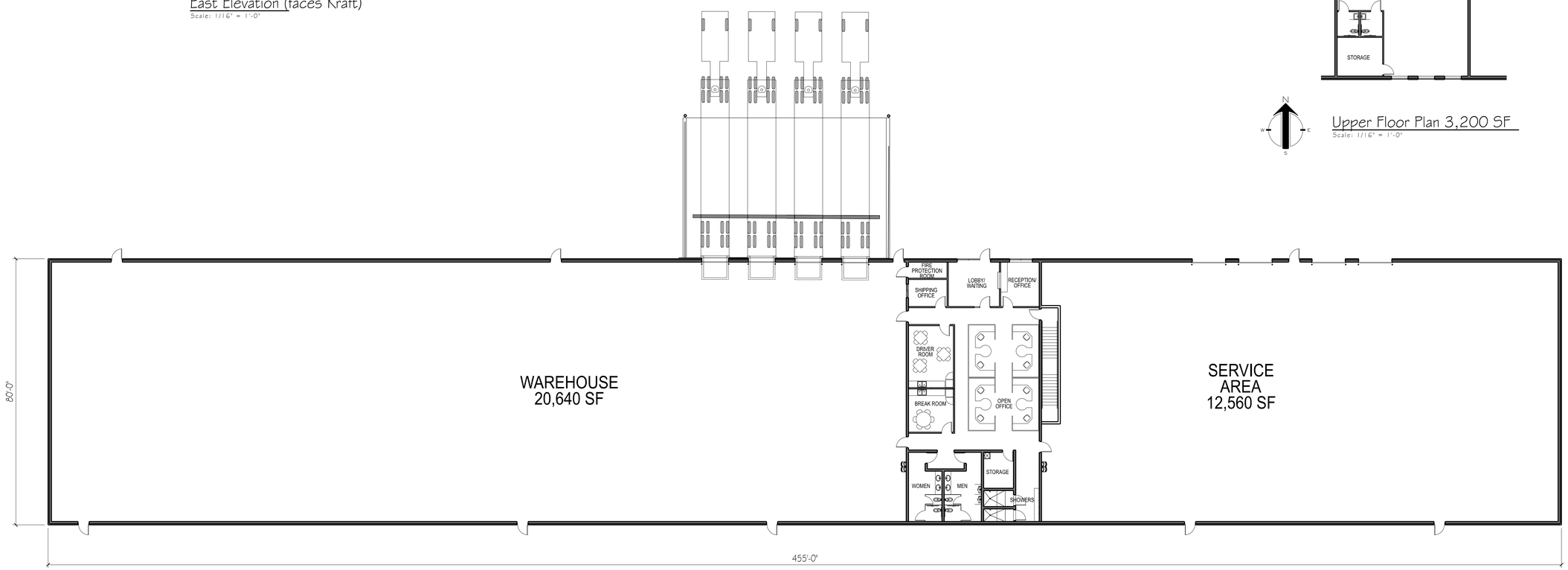
East Elevation (faces Kraft)

Scale: 1/16" = 1'-0"



Upper Floor Plan 3,200 SF

Scale: 1/16" = 1'-0"



Proposed Floor Plan- 36,400 SF

Scale: 1/16" = 1'-0"

Mark	Description	Date
	FOR SITE PLAN APPROVAL	03/01/23

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Jeffrey Parker architects

ARCHITECTURE PLANNING ENGINEERING

855 28th Streef SE
Grand Rapids MI 49508

Phone: 616-241-0090
Fax: 616-241-0098

New Facility For:

Fleet Quest Logistics LLC

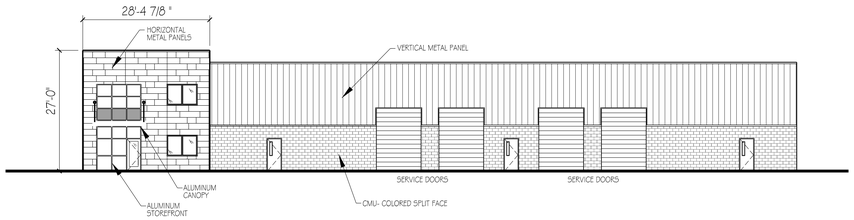
Knapp Ave, Cascade Township Michigan

Floor Plan

Issued
-

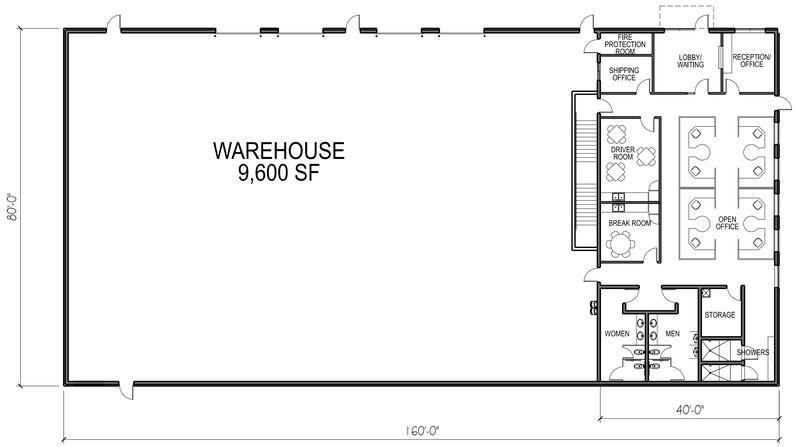
Project No.
23011

Drawing No.
A1.0



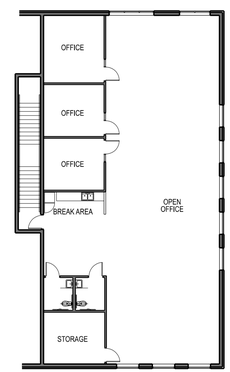
West Elevation

Scale: 1/16" = 1'-0"



Proposed Floor Plan- 12,800 SF

Scale: 1/16" = 1'-0"



Upper Floor Plan 3,200 SF

Scale: 1/16" = 1'-0"

Mark	Description	Date
	FOR SITE PLAN APPROVAL	03/01/23

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Jeffrey Parker architects

ARCHITECTURE PLANNING ENGINEERING

855 28th Street SE
Grand Rapids MI 49508

Phone: 616-241-0090
Fax: 616-241-0098

New Facility For:

Fleet Quest Logistics LLC

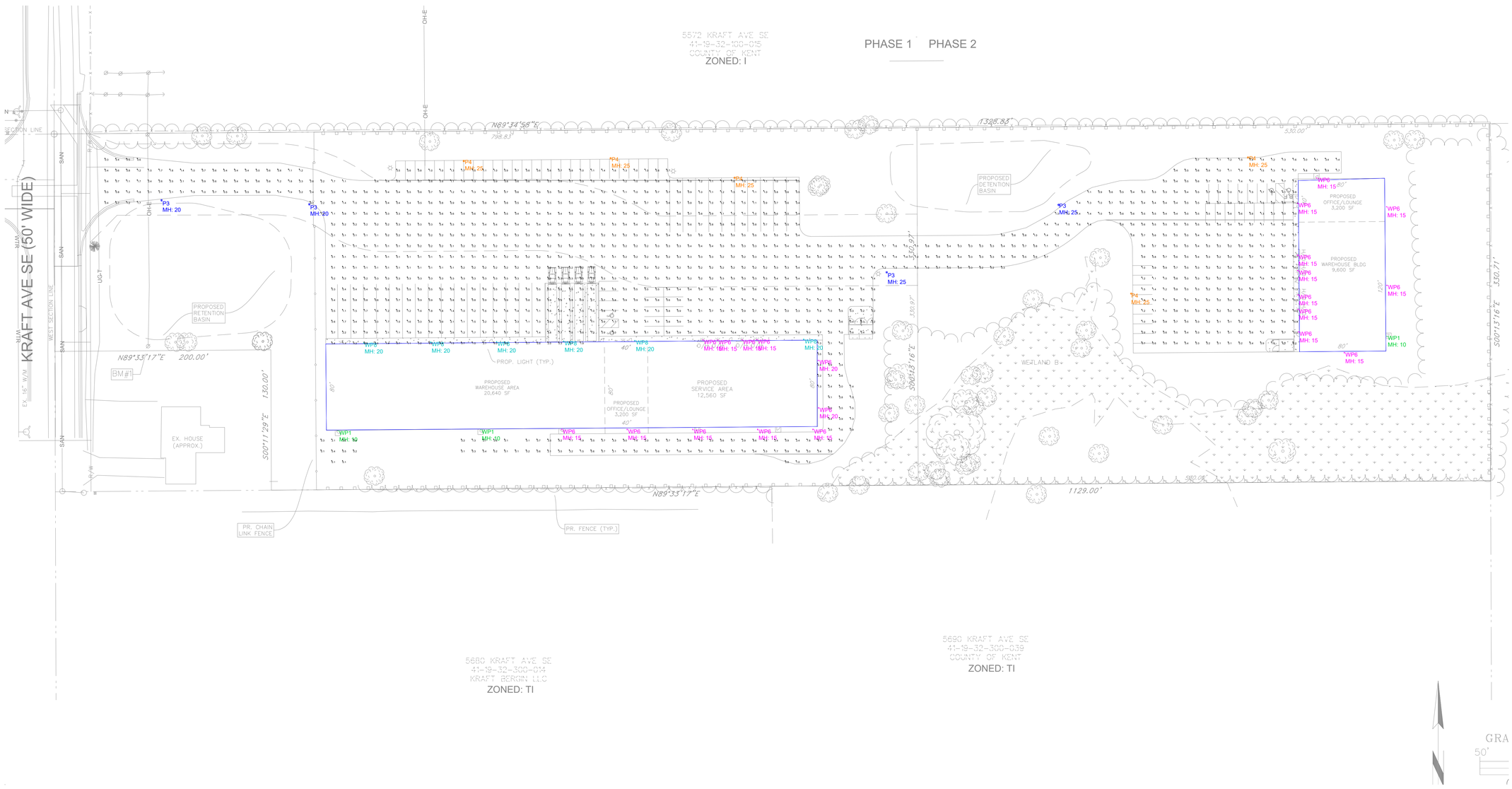
Knapp Ave, Cascade Township Michigan

Floor Plan-Phase 2

Issued
-

Project No.
23011

Drawing No.
A1.1



PHOTOMETRIC PLAN

SCALE: NTS

Filename: S:\GRAND RAPIDS\Layouts\RANDOMS\FLEET QUEST TRANSPORTATION\LOT LIGHTING.AGI

Crites, Tidey, & Assoc., Inc
908C West River Center Dr
Comstock Park MI 49321
PH: 616-647-2400
www.critestidey.com

PHOTOMETRIC EVALUATION
NOT FOR CONSTRUCTION
Based on the information provided, all dimensions and luminaire locations represent a recommended application. The engineer and/or architect must determine the applicability of the layout regarding existing or future field conditions.

This lighting layout represents illumination levels calculated using laboratory data taken under controlled conditions in accordance with The Illuminating Engineering Society (IES) approved method. Actual performance of a manufacturer's luminaires may vary due to changes in electrical voltage, tolerance in LEDs, and other field conditions. Calculations may not include obstructions such as buildings, curbs, landscaping, or other architectural elements. Fixture nomenclature may not include mounting hardware or poles. This layout is for photometric evaluation purposes only and should not be used as a construction document or as a final document for ordering product.

DESIGNED FOR:

FLEET QUEST TRANSPORTATION

ADDRESS

SALES
QUOTES

DATE
4.6.2023

DESIGNER
JEN YONKERS

REVISIONS

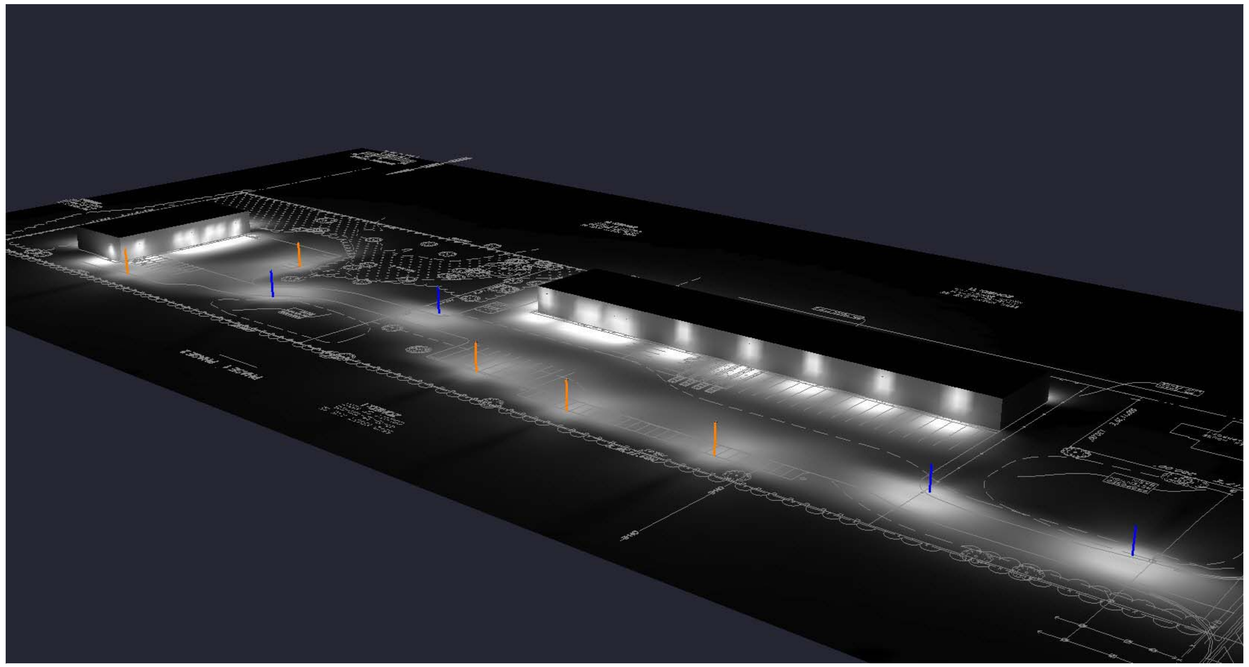
DATE	NAME
XX	XX

SHEET
1

Luminaire Schedule											
Scene: GEN											
Symbol	Qty	Label	Arrangement	LLD	LDD	BF	[MANUFAC]	Description	MNT HEIGHT	MNT TYPE	Ttl Watts
	4	P3	Single	0.980	0.940	1.000	COOPER - LUMARK	PRV-PA1B-740-U-T3	20, 25	POLE	296
	5	P4	Single	0.980	0.940	1.000	COOPER - LUMARK	PRV-PA1B-740-U-T4W	25	POLE	370
	3	WP1	Single	0.980	0.940	1.000	COOPER - LUMARK	XTOR1B	10	WALL	36.6
	21	WP6	Single	0.980	0.940	1.000	COOPER - LUMARK	XTOR6B	15, 20	WALL	1218
	6	WP8	Single	0.980	0.940	1.000	COOPER - LUMARK	XTOR8B	20	WALL	486

Calculation Summary							
Scene: GEN							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
LOT	Illuminance	Fc	1.36	15.6	0.1	13.60	156.00

NOTES:
- CALC AT GRADE
- CALC GRID IS 10X10



SCHEDULES

SCALE: NTS

Filename: S:\GRAND RAPIDS\Layouts\RANDOMS\FLEET QUEST TRANSPORTATION\LOT LIGHTING.AGI

Crites, Tidey, & Assoc., Inc
908C West River Center Dr
Comstock Park MI 49321
PH: 616-647-2400
www.critestidey.com

PHOTOMETRIC EVALUATION
NOT FOR CONSTRUCTION
Based on the information provided, all dimensions and luminaire locations represent a recommended application. The engineer and/or architect must determine the applicability of the layout regarding existing or future field conditions.

This lighting layout represents illumination levels calculated using laboratory data taken under controlled conditions in accordance with The Illuminating Engineering Society (IES) approved methods. Actual performance of a manufacturer's luminaires may vary due to changes in electrical voltage, tolerance in LEDs, and other field conditions. Calculations may not include obstructions such as buildings, curbs, landscaping, or other architectural elements. Fixture nomenclature may not include mounting hardware or poles. This layout is for photometric evaluation purposes only and should not be used as a construction document or as a final document for ordering product.

DESIGNED FOR:

FLEET QUEST TRANSPORTATION

ADDRESS

SALES
QUOTES

DATE
4.6.2023

DESIGNER
JEN YONKERS

REVISIONS

DATE	NAME
XX	XX

SHEET
2

CASCADE CHARTER TOWNSHIP

5920 Tahoe Drive SE Grand Rapids, Michigan 49546-7140

Date April 11, 2023
To Brian Hilbrands
From Aric Thorne, PE
Subject Site Plan Review: Fleet Quest Trucking Facility, 5610-20 Kraft Ave SE

I have reviewed the site plan for Fleet Quest Logistics prepared by Roosien & Associates. **The current site plan and basis of this review are dated April 10, 2023.** The applicant is proposing the construction of a trucking facility consisting of two warehouse buildings with adjacent office and service spaces.

Stormwater and Drainage

The proposed project is being reviewed under the 2022 Stormwater Ordinance and the criteria in the Stormwater Standards Manual revised March 2021.

The site combines two existing parcels totaling 9.5-acres. One parcel is vacant and the other holds a single-family residence to be removed. The land is partially wooded with wetland along the south property line and southeast corner.

The project site is in Flood Control Zone 2, requiring detention for the 25-year storm with a maximum release rate of 0.13-cfs. Proposed development consists of 36,400-sft and 12,800-sft combination warehouse, office, and service buildings as part of a two-phase construction plan, respectively. A private access road will connect the two facilities, parking, and truck loading to Kraft Ave SE. A private sewer conveyance system and two detention basins are included for stormwater controls.

Flood Control

The applicant provided proposed detention basin specifications with supporting design calculations. A general approximation of soil types and characteristics were used from the Natural Resources Conservation Service. The applicant indicated that a proper geotechnical report has been ordered, but has not yet been delivered. The detention basins function independently of each other. Proposed storm sewer in phase 1 conveys to the detention basin to the west and in phase 2, to the basin to the east.

An outlet in storm structure OS-17 drains the west detention basin through CB-18 in Kraft Ave SE and into the ditch line north of the driveway on the east side of the public road. Emergency overflow is provided into the right-of-way space adjacent to the basin. In the east detention basin, outlet structure OC-4 routes overflow by means of a riser pipe to an outlet southeast through

existing wetland. Pretreatment is achieved through sediment forebays located at and including entry points for both detention basins. Riprap is included at storm sewer outlets.

Water Quality and Channel Protection

Water quality and channel protection are provided through detention basins on-site. Each is designed with supporting calculations for the 25-year storm event; each account for minimum 1-foot of freeboard above the calculated required storage volume; and each include emergency overflow routes.

Drainage Plan

The applicant has submitted plans with existing and proposed drainage patterns, existing topography, and proposed grading. Side slopes within and adjacent to basins are provided and meet minimum standards.

Applicant provided the Wetland Delineation Report upon request. The proposed plans appear to indicate the regulated areas in the report and do not constitute permit request from the Department of Environment, Great Lakes, and Energy. It is the responsibility of the owner to understand the restrictions on and around these areas and to obtain such permit should plan revisions infringe on them.

A maintenance agreement and a long-term maintenance plan are required before construction begins. The maintenance agreement and plan should include at a minimum the cleaning of pretreatment areas; cleaning of the detention basins; and cleaning of catch basin sumps including sediment and debris removal from outlet structures.

Utilities and General Comments

Plans indicate connections to City of Grand Rapids water main and sanitary sewer main. I have discussed both with respect to the site plan with Arden Postema at the City. I provide summary of my review and relevant parts of that discussion below.

Water Main

The site plan proposes: a live tap of the water main in Kraft Ave SE; 12-inch main onto the parcel, inside the pavement footprint, and up to the phase 1 and 2 boundary line, terminating at a valve and box; and 2-inch water services to connect both buildings to the main. Arden discussed with me requiring the owner to extend the water main to the east parcel line in anticipation of a future connection at 5867 60th St SE. This connection would service the parcel if developed and allow for looping this branch of water main back into the system, which is a preferred design over a dead-end service. Such would require additional installed length of main and easement space from the owner.

Sanitary Sewer

The site plan proposes connection to sanitary main in Kraft Ave SE; 8-inch main onto the parcel and terminating at the phase 1 and 2 boundary line; 6-inch lateral to serve the building in phase 1; and 2-inch forcemain to serve the building in phase 2. Arden indicated that the sanitary manhole that the proposed main is tapping into is a low point in the sanitary system and ideal for also serving future development on the parcel at 5867 60th St SE. It would be desirable from the standpoint of the City that sanitary main, in addition to water main, be installed to the east parcel line for possible future connection. This though would require that the proposed main not only be longer but deeper.

Important to note that the County of Kent owns both the parcel immediately north of the subject site at 5572 Kraft Ave SE, as well as 5867 60th St SE. The latter could be served both water and sanitary in the future through 5572 or via 60th St SE to Kraft Ave SE. I believe the current utility site plan is appropriate. The owner is ultimately responsible for the approval and obtaining permit from the City of Grand Rapids.

Storm Sewer and Other

The private storm sewer system consisting of catch basins, sewer, detention basin, and outlets are all called out and include rim and invert elevations where applicable. The applicant noted an error and correction to an invert in a March 16, 2023 email.

The proposed private road connects to Kraft Ave SE and aligns with International Pkwy SE. Plans specify a 30-foot-wide improved surface, approximately 4.0-inch total asphalt bit over 8-inch aggregate base and 12-inch sand, and private easement 33-foot off centerline. The road meets the design standards outlined in the Township Ordinance for private streets. Owner is responsible for obtaining permit from Kent County Road Commission (KCRC) prior to construction.

Soil Erosion and Sedimentation Control

Applicant indicated limits of disturbance and provided the following measures: permanent/temporary seeding, riprap, geotextile silt fence, inlet protection, and soil erosion control blanket. I recommend adding a provision to limit the tracking of sediment at the construction entrance and exit. KCRC must review and approve plans and issue a soil erosion and sedimentation control permit before construction may begin.

Summary

The proposed stormwater management design meets the Township Stormwater Ordinance requirements for the site location pending review of the geotechnical report. Once this report is received, it should be provided to Cascade Charter Township, after which I may recommend approval from an engineering point of view.

Let me know if you have any questions or concerns.

STAFF REPORT

STAFF REPORT:	Case # 23-3758
REPORT DATE:	April 12, 2023
PREPARED FOR:	Cascade Charter Township Planning Commission
MEETING DATE:	April 17, 2023
PREPARED BY:	Brian Hilbrands, Planning Director

APPLICANT
Scott G, LLC, attn: Scott Geerlings
8515 Homestead Ave, Suite 102
Zeeland MI 49464

STATUS OF APPLICANT:	Developer
REQUESTED ACTION:	Site Plan Review for an expansion of an existing parking lot.
EXISTING ZONING OF SUBJECT PARCEL:	TI, Transitional Industrial
GENERAL LOCATION:	On Kraft Ave just north of 60th St.
PARCEL SIZE:	8.5 Acres
PROPERTY LOCATION:	5784 Kraft Ave
EXISTING LAND USE ON THE PARCEL:	Tire distribution warehouse
ADJACENT AREA LAND USES:	Vacant
ZONING ON ADJOINING PARCELS:	N,S,W - TI E - I

STAFF COMMENTS:

1. The applicant is requesting site plan approval to construct an addition to an existing parking lot. The site plan was reviewed under Section 21.07 of the Site Plan Review Chapter of the Zoning Ordinance.

2. The original 65,000 square foot building was approved in August of 2019 and was built to plan. The 100,000 square foot addition was approved in March of 2022 and is currently under construction.

3. The site plan was approved with the minimum number of parking spaces needed to meet Township regulations. Now as construction is nearing completion the applicant has determined that additional parking will be needed, resulting in the parking lot expansion.

4. The parking lot expansion will add 132 spaces on the southern end of the site, resulting in a total of 223 parking spaces.

5. A 20' bufferyard is required between any paved surface and adjacent property lines. In order to meet the bufferyard requirement the applicant is proposing a boundary line adjustment along the south property line. This boundary line adjustment will need to be approved before construction can begin.

6. The boundary line adjustment will allow the 20' bufferyard requirement to be met, but the site plan does not show any landscape plantings along the south property line. Landscape plantings should be added which meet the requirements of bufferyard Type C, which requires 2 canopy trees, 4 understory trees, and 6 shrubs per 100 linear feet. The southern property line appears to be approximately 500' in length. A corresponding landscape bond should also be submitted, which based on the planting requirements and length of the property line I estimate should be no less than $15,000.

7. The site plan shows an additional driveway being added to access the new parking area from the adjacent private street. This would be the third driveway opening for the parcel. The zoning ordinance allows for 1 driveway opening onto an abutting street, plus 1 additional driveway entrance along a continuous site with frontage in excess of 300', or 2 additional driveway entrances if the frontage exceeds 600'. I calculate the frontage along the private street to total approximately 305', so two driveway openings are permitted. As a result, the site plan should be revised so that there is a maximum of two driveway entrances off the private street.

8. A photometric plan was submitted that meets Township regulations.

9. The site has an agreement with the neighbor to the south to provide the storm water detention pond. This pond is being increased in size to accommodate the new project. It appears that the expanded pond is inside the existing storm water easement. However, some of the site grading needed to accommodate the addition is also on the adjacent property and will need to be approved by the property owner to the south.

10. The site plan has been reviewed by the Fire Department and they did not have any concerns.

11. The Township engineer has reviewed and approved the plan, and their comments are included in your packet. A revised stormwater maintenance agreement will need to be provided.

12. The Gerald R Ford Airport staff has been made aware of the project.

Section 21.07: Criteria For Site Plan Approval:

The Planning Commission shall use the following criteria in evaluating a site plan submittal:

1. Whether the required information has been furnished in sufficiently complete and understandable form to allow an accurate description of the proposed use(s) and structure(s) in terms of density, location, area, height, bulk, placement, setbacks, performance characteristics, parking, and traffic circulation.

2. Whether there are ways in which the configuration of uses and structures can be changed which would improve the impact of the development on adjoining and nearby properties, persons, and activities, and on the community, while allowing reasonable use of the property within the scope of district regulations and other regulations of this Ordinance that are applicable to the property and proposed use and structures.

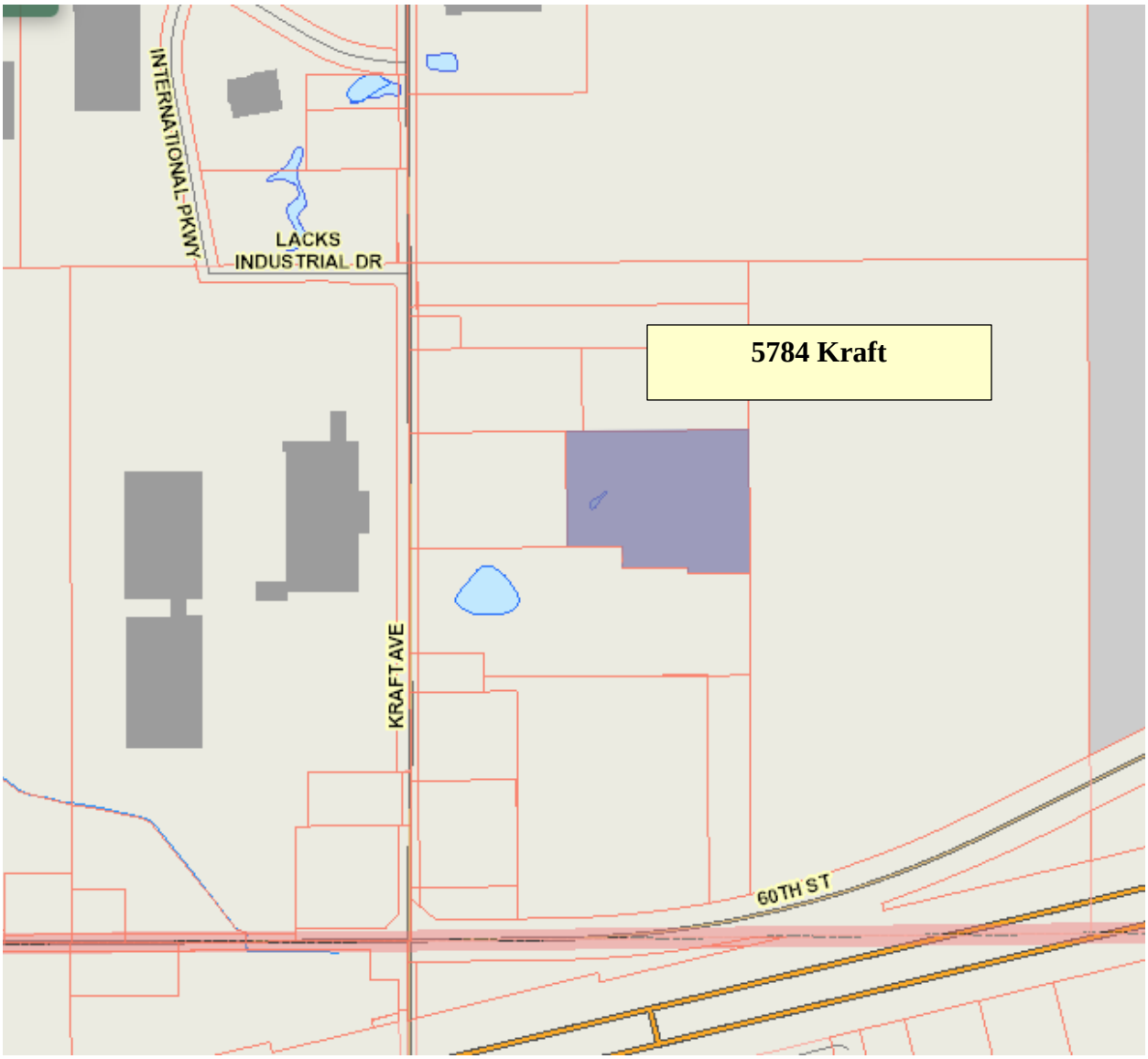
3. The extent to which natural features and characteristics of the large trees, natural groves, watercourses, and similar will be preserved; the regard given to existing natural features that would add attractiveness to the property and environs if they were preserved; the preservation of natural drainage systems the dedication and/or provision, where appropriate, of scenic easements, natural buffering, and other techniques for preservation and enhancement of the physical environment.

STAFF RECOMMENDATION:

Staff is recommending Approval of the site plan for the parking lot addition with the following conditions.

1. Provide approval from the property owner to the south for the grading on their property.
2. The applicant complies with the Township Engineer letter dated March 31, 2023, and all necessary permits are obtained before construction begins.
3. Record a revised stormwater maintenance agreement.
4. Provide a landscape plan that meets Township requirements, and provide a landscape bond in the amount of no less than $15,000.
5. Revise the site plan so that there is a maximum of two driveway entrances off the private street.
6. Apply for and receive approval for the boundary line adjustment.

ATTACHMENTS: Application
Site plan
Township Engineer letter


INTERNATIONAL PKWY
LACKS
INDUSTRIAL DR
5784 Kraft
KRAFT AVE
60TH ST

CASCADE CHARTER TOWNSHIP

5920 Tahoe Dr. SE, Grand Rapids,
Michigan 49546-7140

PLANNING & ZONING APPLICATION

APPLICANT: Name: ScottG, LLC Attn: Scott Geerlings

Address: 8516 Homestead Avenue, Suite 102

City & Zip Code Zeeland, MI 49464

Telephone: 616-772-6070

Email Address: sgeerlings@midwestbuild.com

OWNER: * (If different from Applicant)

Name: same as applicant

Address: _____

City & Zip Code: _____

Telephone: _____

Email Address: _____

NATURE OF THE REQUEST: (Please check the appropriate box or boxes)

☐	Administrative Appeal	☐	Administrative Site Plan Review
☐	Deferred Parking	☐	P.U.D. – Rezoning *
☐	P.U.D. – Site Condominium *	☐	Rezoning
☒	Site Plan Review *	☐	Sign Variance Subdivision
☐	Special Use Permit	☐	Plat Review *
☐	Zoning Variance	☒	Other: _____ * Amendment to site plan

**** Requires an initial submission of 5 copies of the completed site plan***

BRIEFLY DESCRIBE YOUR REQUEST:**

Site plan review request; Revision and additions to parking

(**Use Attachments if Necessary)

-SEE OTHER SIDE-

LEGAL DESCRIPTION OF PROPERTY:**

PART OF SW 1/4 COM 1115.73 FT S 0D 11M 29S E ALONG W SEC LINE & 614.0 FT N 89D 31M 35S E ALONG S LINE OF N 453 FT OF S 1/2 NW 1/4 SW 1/4 FROM W 1/4 COR TH N 89D 31M 35S E ALONG SD S LINE 220.0 FT TH S 0D 28M 25S E 59.50 FT TH SWLY 25.83 FT ON A 60.0 FT RAD CURVE TO RT /LONG CHORD BEARS S 11D 23M 17S W 25.64 FT/ TH N 89D 48M 31S E 258.31 FT TH S 0D 13M 16S E 20.0 FT TH N 89D 48M 31S E 242.0 FT TO E LINE OF W 1/2 SW 1/4 TH N 0D 13M 16S W ALONG SD E LINE 560.06 FT TO N LINE OF S 1/2 NW 1/4 SW 1/4 TH S 89D 31M 35S W ALONG SD N LINE 715.18 FT TO E LINE OF W 614 FT OF SW 1/4 TH S 0D 11M 29S E ALONG SD E LINE 453.0 FT TO BEG * SEC 32 T6N R10W 8.53 A.

(**Use Attachments if Necessary)

PERMANENT PARCEL (TAX) NUMBER: 41-19 -32-300-045

ADDRESS OF PROPERTY: 5784 Kraft Avenue SE, Cascade, MI 49546

PRESENT USE OF THE PROPERTY: Industrial Building

NAME(S) & ADDRESS(ES) OF ALL OTHER PERSONS, CORPORATIONS, OR FIRMS HAVING A LEGAL OR EQUITABLE INTEREST IN THE PROPERTY:

Name(s)	**Address(es)**
Midwest Construction Group, Inc.	8576 Homestead Ave, Ste 102, Zeeland, MI 49464

SIGNATURES

I (we) the undersigned certify that the information contained on this application form and the required documents attached hereto are to the best of my (our) knowledge true and accurate. I (we) also agree to reimburse the Cascade Charter Township for all costs, including consultant costs, to review this request in a timely manner. I (we) understand that these costs may also include administrative reviews which may occur after the Township has taken action on my (our) request.

I (we) the undersigned also acknowledge that the proposed project does not violate any known property restrictions (i.e. plat restrictions, deed restrictions, covenants, etc.)

Scott Geerlings
Owner – Print or Type Name
(*If different from Applicant)

*
Owner's Signature & Date
(*If different from Applicant)

Scott Geerlings
Applicant – Print or Type Name

3-13-23
Applicant's Signature & Date

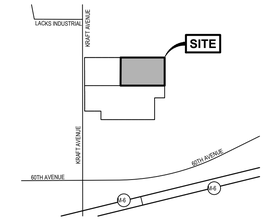
PLEASE ATTACH ALL REQUIRED DOCUMENTS NOTED IN THE PROCESS REVIEW SHEET – THANK YOU

Rev. 7/27/21

5784 KRAFT AVE. SE

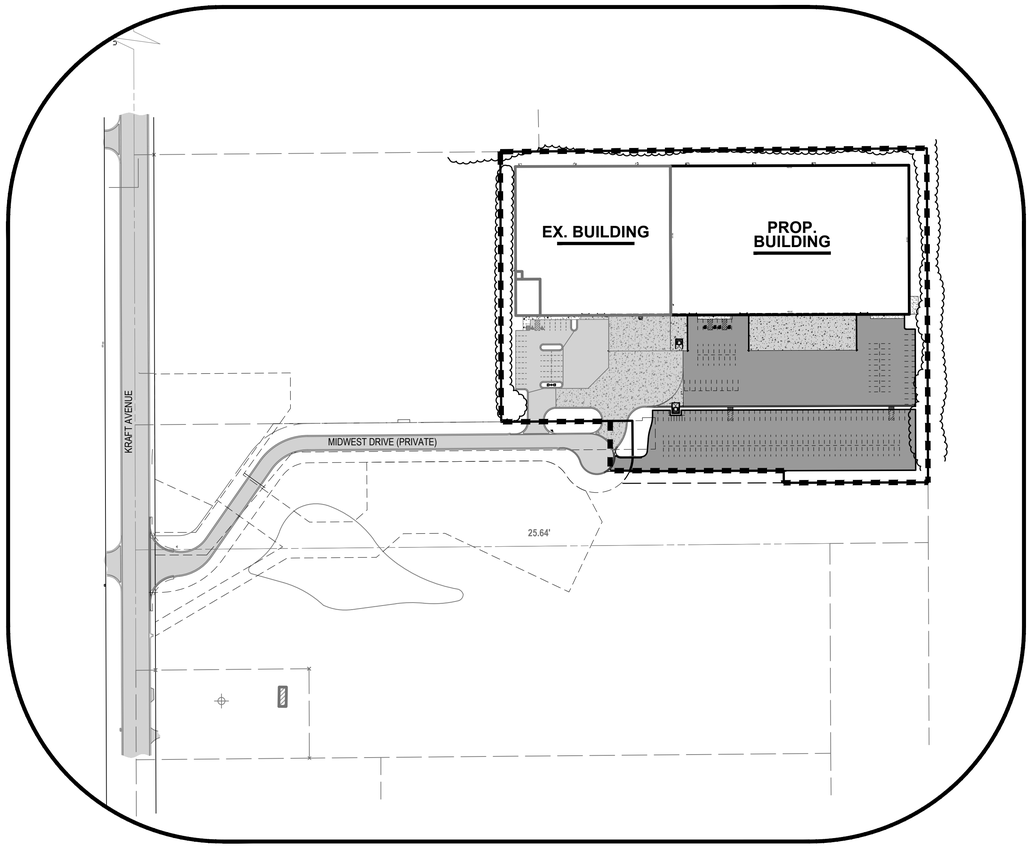
CASCADE TOWNSHIP, KENT COUNTY, MICHIGAN

0' 60' 120' 240'
SCALE: 1" = 120'



LOCATION MAP
NOT TO SCALE

SITE PLAN



UTILITY COMPANY CONTACTS

Gas	DTE Energy	Brian Redd	(616) 954-4588
Electric	Consumers Energy	Damion White	(616) 530-4358
Telephone	AT&T	Cory VanTil	(616) 246-7573
Cable	Comcast	Jim Zawacki	(616) 575-0501

SHEET INDEX

Cover Sheet	C-100	Page 1
Existing Site Conditions Plan	C-201	Page 2
Site Layout Plan	C-205	Page 3
Grading & S.E.S.C. Plan	C-300	Page 4
Utility Plan	C-400	Page 5
Details and Specifications	C-500	Page 6

LEGAL DESCRIPTION

PART OF THE SOUTHWEST 1/4, SECTION 32, TOWN 6 NORTH, RANGE 10 WEST,CASCADE TOWNSHIP KENT COUNTY MICHIGAN, DESCRIBED AS: COMMENCING AT THE WEST 1/4 CORNER OF SAID SECTION 32; THENCE S00°11'29"E 1115.73 FEET ALONG THE WEST LINE OF SAID SECTION 32, THENCE N89°31'35"E 614.00 FEET ALONG THE SOUTH LINE OF THE NORTH 453 FEET OF THE SOUTH 1/2 OF THE NORTHWEST 1/4 OF SAID SOUTHWEST 1/4 TO THE POINT OF BEGINNING; THENCE N00°11'29"W 453.00 FEET ALONG THE EAST LINE OF THE WEST 614 FEET OF SAID SECTION; THENCE N89°31'35"E 715.18 FEET ALONG THE NORTH LINE OF THE SOUTH 1/2 OF THE NORTHWEST 1/4 OF SAID SOUTHWEST 1/4; THENCE S00°13'16"E 560.06 FEET ALONG THE EAST LINE OF THE WEST 1/2 OF SAID SOUTHWEST 1/4; THENCE S89°48'31"W 242.00 FEET; THENCE N00°13'16"W 20.00 FEET; THENCE S89°48'31"W 258.31 FEET; THENCE NORTHEASTERLY 25.83 FEET ALONG A 60.00 FOOT RADIUS CURVE TO THE LEFT, SAID CURVE HAVING A CENTRAL ANGLE OF 24°40'13", AND A CHORD BEARING N11°23'17"E 25.64 FEET; THENCE N00°28'25"W 59.50 FEET; THENCE S89°31'35"W 220.00 FEET ALONG SAID SOUTH LINE TO THE POINT OF BEGINNING.

811 Know what's **below.** **CALL** before you dig.

UTILITY LOCATIONS ARE DERIVED FROM ACTUAL MEASUREMENTS OR AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATIONS NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THIS AREA.

NOTE:
EXISTING UTILITIES AND SERVICE LINES IDENTIFIED AS "(PLAN)" WERE OBTAINED FROM AVAILABLE AS-BUILT RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY THE LOCATION, DEPTH AND STATUS OF ALL UTILITIES AND SERVICE LINES PRIOR TO NEW CONNECTIONS.

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Grand Rapids, MI 49503
Phone: 616.575.5190
ANN ARBOR
CHICAGO
COLUMBUS
HOLLAND
INDIANAPOLIS
ST. LOUIS

PREPARED FOR:
5784 Kraft Avenue LLC

Scott Geerlings
8516 Homestead Ave.
Zeeland, MI 49464
Phone: 616.772.6070

REVISIONS:

Title: Site Plan Submittal
Drawn: Brad M. Checked: Jack B. Date: 02.08.2022
Title: Site Plan Re-Submittal
Drawn: Brad M. Checked: Jack B. Date: 03.01.2022
Title: RFI #1
Drawn: Chris M. Checked: Jack B. Date: 03.17.2022
Title: RFI #2
Drawn: Chris M. Checked: Jack B. Date: 03.23.2022
Title: Township Site Plan Amendment Submittal
Drawn: MH Checked: Jack B. Date: 03.17.2023

5784 Kraft Avenue SE

Cover Sheet

PART OF THE SW 1/4 OF SECTION 32, T6N, R10W, CASCADE TOWNSHIP, KENT COUNTY, MICHIGAN

STAMP:
STATE OF MICHIGAN
ROGER JACK BARR II
ENGINEER
No. 41990
LICENSED PROFESSIONAL ENGINEER

PROJECT NO:
22400770

SHEET NO:
C-100

22400770-CPT.dwg TW 3/20/2023 12:20

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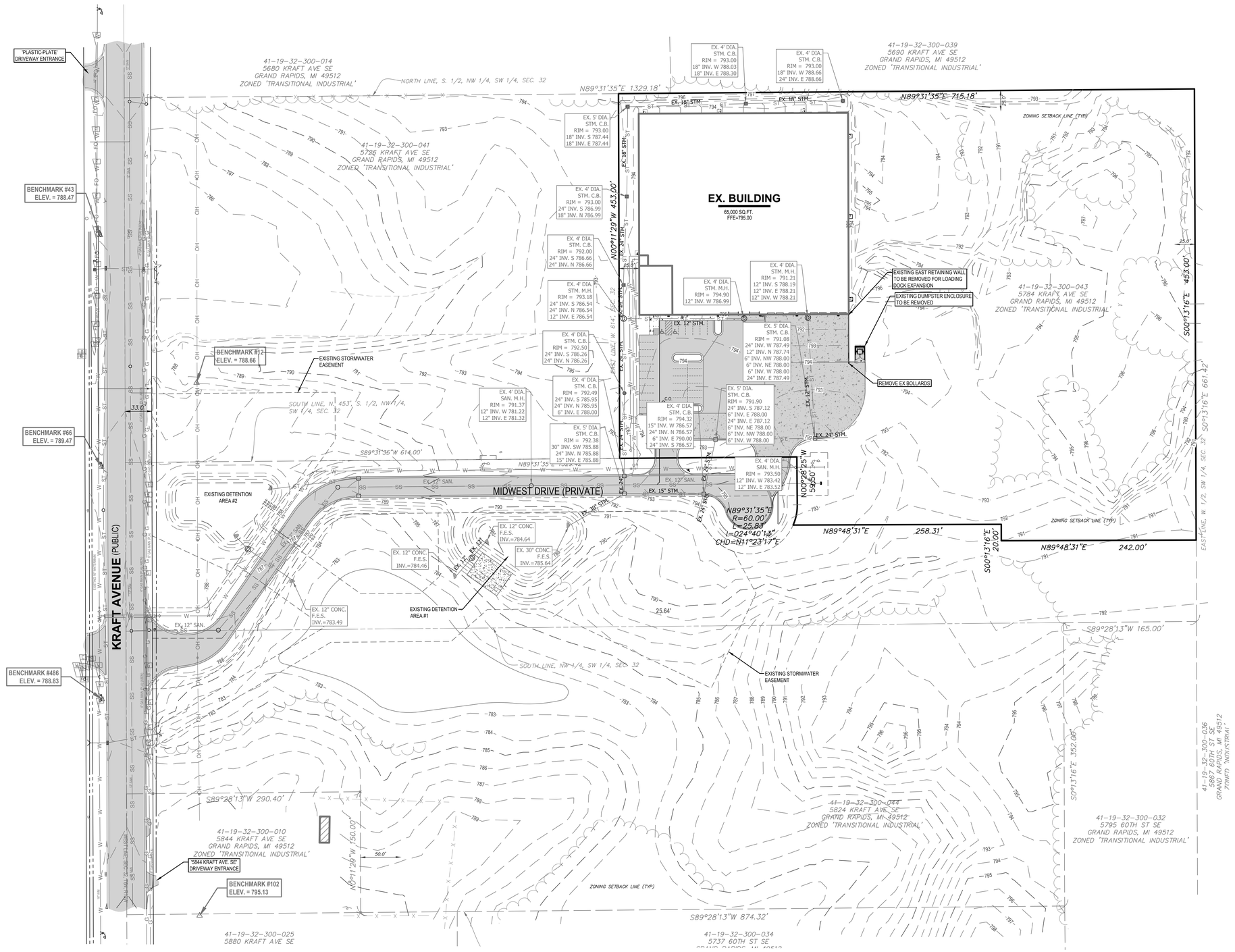

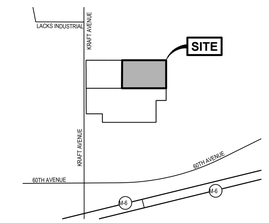

LOCATION MAP
NOT TO SCALE

N

0' 30' 60' 120'
SCALE: 1" = 60'

LEGEND

AC	Air Conditioner	T	Phone Riser
	Benchmark	SB	Soil Boring
	Catch Basin - Round	SBX	Stop Box
	Catch Basin - Square	S	Sign
CO	Cleanout	S	Sanitary Sewer Manhole
C	Cable Riser	D	Stormwater Manhole
	Culvert	TR	Transformer
	Deciduous Tree		Utility Pole
E	Electric Manhole	S GAS	Underground Gas Marker
EM	Electric Meter	WM	Water Meter
E	Electric Riser	W	Water Manhole
	Evergreen Tree	WV	Water Valve
FCT	Faucet	WELL	Water Well
	Flag	C	Cable TV
GM	Gas Meter	E	Electric
G	Gas Riser	FO	Fiber Optic
GV	Gas Valve	G	Gas
	Guy Anchor	OH	Overhead Utility
GP	Guy Pole	SS	Sanitary
HH	Hand Hole	ST	Storm
	Hydrant	T	Telephone
	Light Pole	W	Watermain
MB	Mailbox	X	Fence
M	Miss Dig Flag - Cable		Zoning Setback
E	Miss Dig Flag - Electric		Tree Line
FO	Miss Dig Flag - Fiber Optic	843	Ex. Grade Contour
G	Miss Dig Flag - Gas		Asphalt
W	Miss Dig Flag - Water		Concrete
M	Manhole		Gravel
P	Post		

BENCHMARKS

BENCHMARK #10 ELEV. = 788.66
Boat spike in West side of power pole 1634' North and 89' East of Southwest corner of Section 32, on South side of gravel drive on our parcel, from Kraft Avenue street plans, sheet 5 of 8.

BENCHMARK #43 ELEV. = 788.47
Flange bolt under "E" on hydrant 5' West of curb, 1818' North of Southwest corner of Section 32.

BENCHMARK #66 ELEV. = 789.47
Flange bolt under "E" on hydrant 5' West of curb, 1530' North of Southwest corner of Section 32.

BENCHMARK #427 ELEV. = 795.09
Boat spike on West side of power pole, 970'± North & 90'± East of Southwest corner of Section 32.

BENCHMARK #486 ELEV. = 788.83
Flange bolt under "E" on hydrant 5' West of curb, 1241' North of Southwest corner of Section 32.

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5784 Kraft Avenue SE

Existing Site Conditions Plan

PART OF THE SW 1/4 OF SECTION 32, T6N, R10W, CASCADE TOWNSHIP, KENT COUNTY, MICHIGAN

STAMP:
STATE OF MICHIGAN
ROGER JACK BARR II
ENGINEER
No. 41990
LICENSED PROFESSIONAL ENGINEER

PROJECT NO:
22400770

SHEET NO:
C-201

22400770-CP1.dwg TW 3/20/2023 12:20

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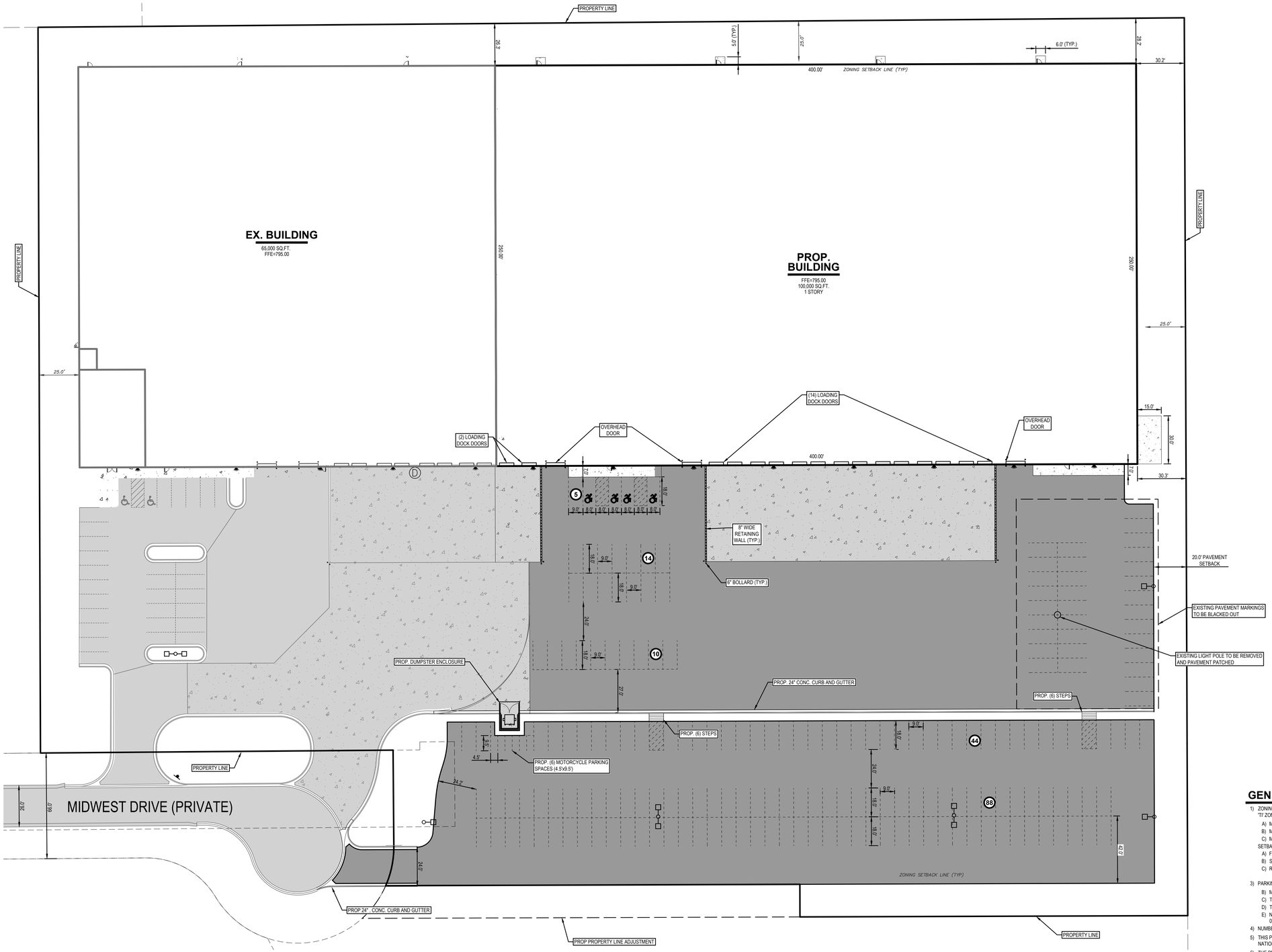

N

0' 15' 30' 60'

SCALE: 1" = 30'

LEGEND

- EXISTING BITUMINOUS
- EXISTING CONCRETE
- PROPOSED BITUMINOUS (HEAVY DUTY)
- PROPOSED CONCRETE (HEAVY DUTY)
- PROPOSED LIGHTS

GENERAL NOTES

1) ZONING OF PROPERTY: TI - TRANSITIONAL INDUSTRIAL
   'TI' ZONING REQUIREMENTS
   - A) MINIMUM LOT AREA = 43,560 SQ.FT.
   - B) MINIMUM LOT WIDTH = 100 FT.
   - C) MAXIMUM BUILDING HEIGHT = 45 FT OR 2 STORIES

   SETBACKS
   - A) FRONT YARD = 50 FT.
   - B) SIDE YARD = 25 FT.
   - C) REAR YARD = 25 FT.
3) PARKING REQUIREMENTS:
   - B) MINIMUM REQUIRED SPACE PER TOWNSHIP = 9'x18' (24' AISLE)
   - C) TYPICAL PARKING SPACE PROVIDED = 9'x18' (24' AISLE)
   - D) TYPICAL BARRIER FREE SPACE = 13'x18'
   - E) NUMBER OF SPACES REQUIRED = 67 (BASED ON TOWNSHIP REQUIREMENTS OF 0.67 SPACES / 1,000 SF.)
4) NUMBER OF SPACES PROVIDED = 161
5) THIS PROJECT IS NOT LOCATED IN THE 100 YEAR FLOOD PLAIN, BASED ON THE NATIONAL FLOOD INSURANCE PROGRAM RATE MAPS
6) THE PERMANENT PARCEL NUMBER FOR THE SITE IS 41-19-32-300-043. THE ADDRESS OF THE PROPERTY IS 5784 KRAFT AVENUE SOUTHEAST.
7) NO FENCES OR WALLS ARE PROPOSED. (EXCEPT LOADING DOCK WALLS)
8) ALL DIMENSIONS TO CONCRETE CURB LINE ARE TO FACE OF CURB, UNLESS OTHERWISE NOTED.

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ST. LOUIS

PREPARED FOR:
5784 Kraft Avenue LLC

Scott Geerlings
8516 Homestead Ave.
Zeeland, MI 49464
Phone: 616.772.6070

REVISIONS:

Title: Site Plan Submittal		
Drawn: Brad M.	Checked: Jack B.	Date: 02.08.2022
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Drawn: Chris M.	Checked: Jack B.	Date: 03.23.2022
Title: Township Site Plan Amendment Submittal		
Drawn: MH	Checked: Jack B.	Date: 03.17.2023

5784 Kraft Avenue SE

Site Layout Plan

PART OF THE SW 1/4 OF SECTION 32, T6N, R10W, CASCADE TOWNSHIP, KENT COUNTY, MICHIGAN

STAMP:

STATE OF MICHIGAN
ROGER JACK BARR II
ENGINEER
No. 41990
LICENSED PROFESSIONAL ENGINEER

PROJECT NO:
22400770

SHEET NO:
C-205

22400770-CP1.dwg TW 3/20/2023 12:20

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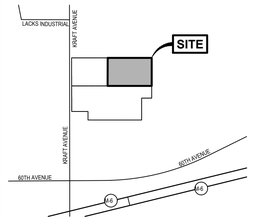


LOCATION MAP

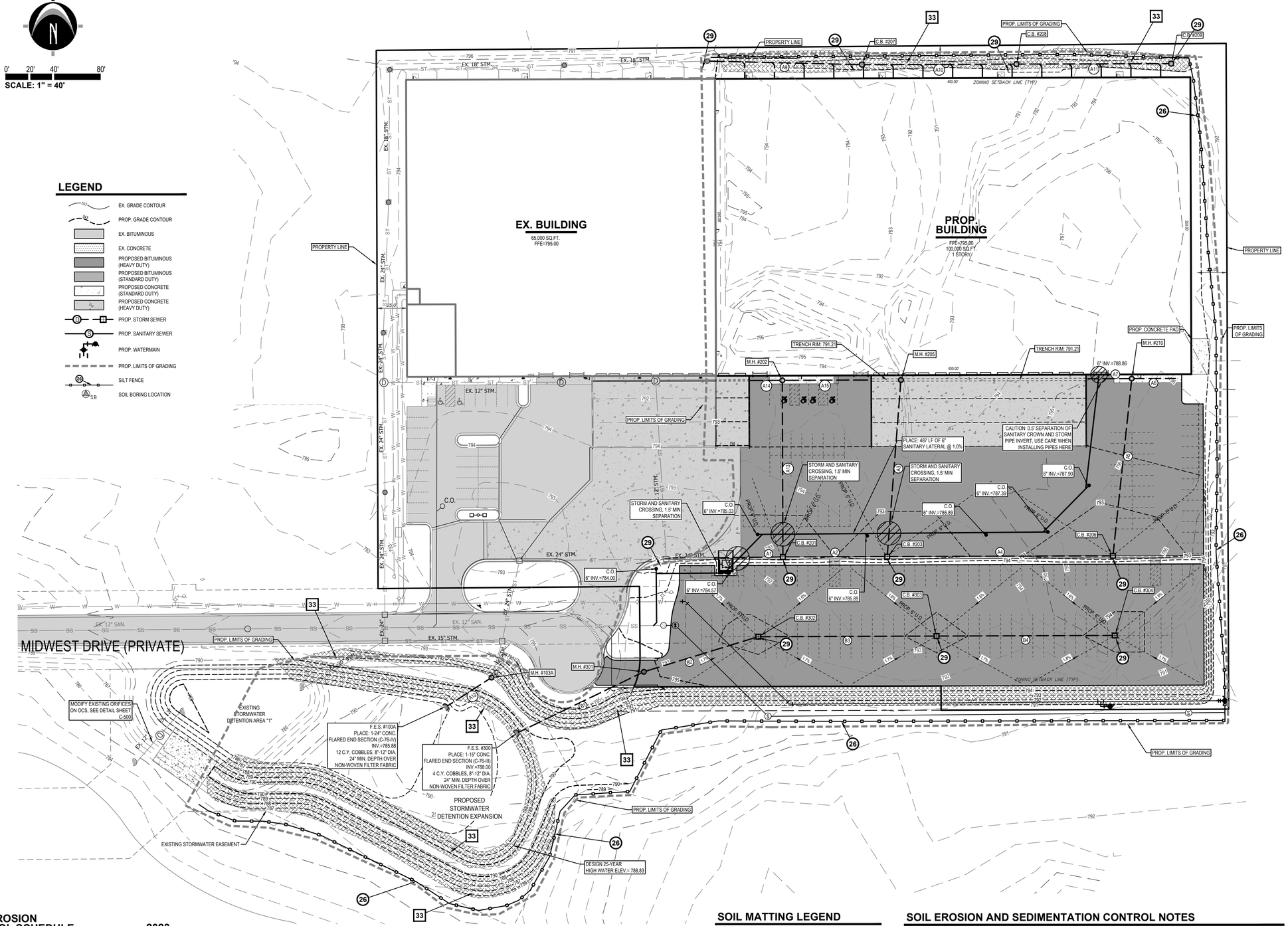
NOT TO SCALE

0' 20' 40' 80'

SCALE: 1" = 40'

LEGEND

- EX. GRADE CONTOUR
- PROP. GRADE CONTOUR
- EX. BITUMINOUS
- EX. CONCRETE
- PROPOSED BITUMINOUS (HEAVY DUTY)
- PROPOSED BITUMINOUS (STANDARD DUTY)
- PROPOSED CONCRETE (STANDARD DUTY)
- PROPOSED CONCRETE (HEAVY DUTY)
- PROP. STORM SEWER
- PROP. SANITARY SEWER
- PROP. WATERMAIN
- PROP. LIMITS OF GRADING
- SILT FENCE
- SOIL BORING LOCATION



SOIL EROSION CONTROL SCHEDULE 2023

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
PLACE SILT FENCE												
STRIP & STOCKPILE TOPSOIL												
CONSTRUCT CONNECTION TO STORM SEWER												
ROUGH GRADE SITE												
CONSTRUCT BUILDING FOUNDATION AND BUILDING												
CONSTRUCT IMPROVEMENTS AROUND BUILDING												
CONSTRUCT UTILITY LINES TO BUILDING												
FINISH GRADE SITE												
PAVE SITE												
RESPREAD TOPSOIL/COMPACTION												
SEED DISTURBED AREAS												
SITE RESTORATION/CLEAN UP												

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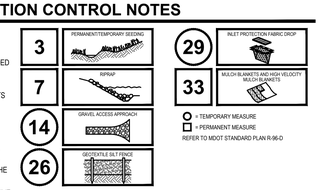
SOIL MATTING LEGEND

- PLACE: 33,066 S.Y. (TOTAL) EROSION CONTROL REVEGATATION MAT (NORTH AMERICAN GREEN SC-150 OR APPROVED EQUAL) OVER 4" TOPSOIL ACROSS BOTH SIDES OF BANK, OVERLAP ROLL ENDS MIN. 3", PLACE & STAKE MATTING PER MFG. RECOMMENDATIONS

SOIL EROSION AND SEDIMENTATION CONTROL NOTES

1) CONTRACTOR SHALL POSSESS THE SOIL EROSION AND SEDIMENTATION CONTROL PERMIT PRIOR TO START OF ANY EARTH WORK.
2) CONTRACTOR SHALL MODIFY THIS SOIL EROSION AND SEDIMENTATION CONTROL PLAN TO SHOW THE ADDITIONAL CONTROL MEASURES INTENDED TO BE USED DURING CONSTRUCTION. SUBMIT MODIFICATIONS TO THE CONTROLLING AGENCY, THE OWNER, AND THE ENGINEER.
3) EROSION PROTECTION SHALL BE PROVIDED AT ALL STORM SEWER INLETS AND OUTLETS. ALL BARE EARTH SHALL BE STABILIZED WITH SEEDING.
4) REFER TO THE M.D.O.T. "SOIL EROSION AND SEDIMENTATION CONTROL MANUAL" (APRIL 2006) FOR ADDITIONAL INFORMATION
5) THE ENTIRE STORM SEWER SYSTEM SHALL BE CLEANED AND FLUSHED FOLLOWING CONSTRUCTION AND PAID RECEIPT THEREOF PROVIDED TO THE ENGINEER AND COUNTY SESC AGENT PRIOR TO FINAL PAYMENT TO THE CONTRACTOR OR FINAL ACCEPTANCE OF THE CONSTRUCTION BY THE OWNER.
6) THE CONTRACTOR SHALL BE RESPONSIBLE TO INSPECT, TAKE CORRECTIVE ACTION AND MAINTAIN ALL TEMPORARY SESC MEASURES DAILY AND AFTER EACH RAIN EVENT UNIT FINAL COMPLETION AND ACCEPTANCE OF THE PROJECT.



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5784 Kraft Avenue SE

Grading & S.E.S.C. Plan

PART OF THE SW 1/4 OF SECTION 32, T6N, R10W, CASCADE TOWNSHIP, KENT COUNTY, MICHIGAN

STAMP:
STATE OF MICHIGAN
ROGER JACK BARR II
ENGINEER
No. 41990
LICENSED PROFESSIONAL ENGINEER

PROJECT NO: 22400770

SHEET NO: C-300

22400770-CPT.dwg TW 3/20/2023 12:20

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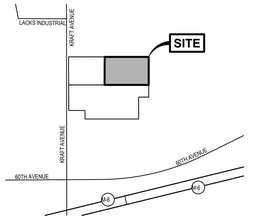

LOCATION MAP
NOT TO SCALE

0' 20' 40' 80'
SCALE: 1" = 40'

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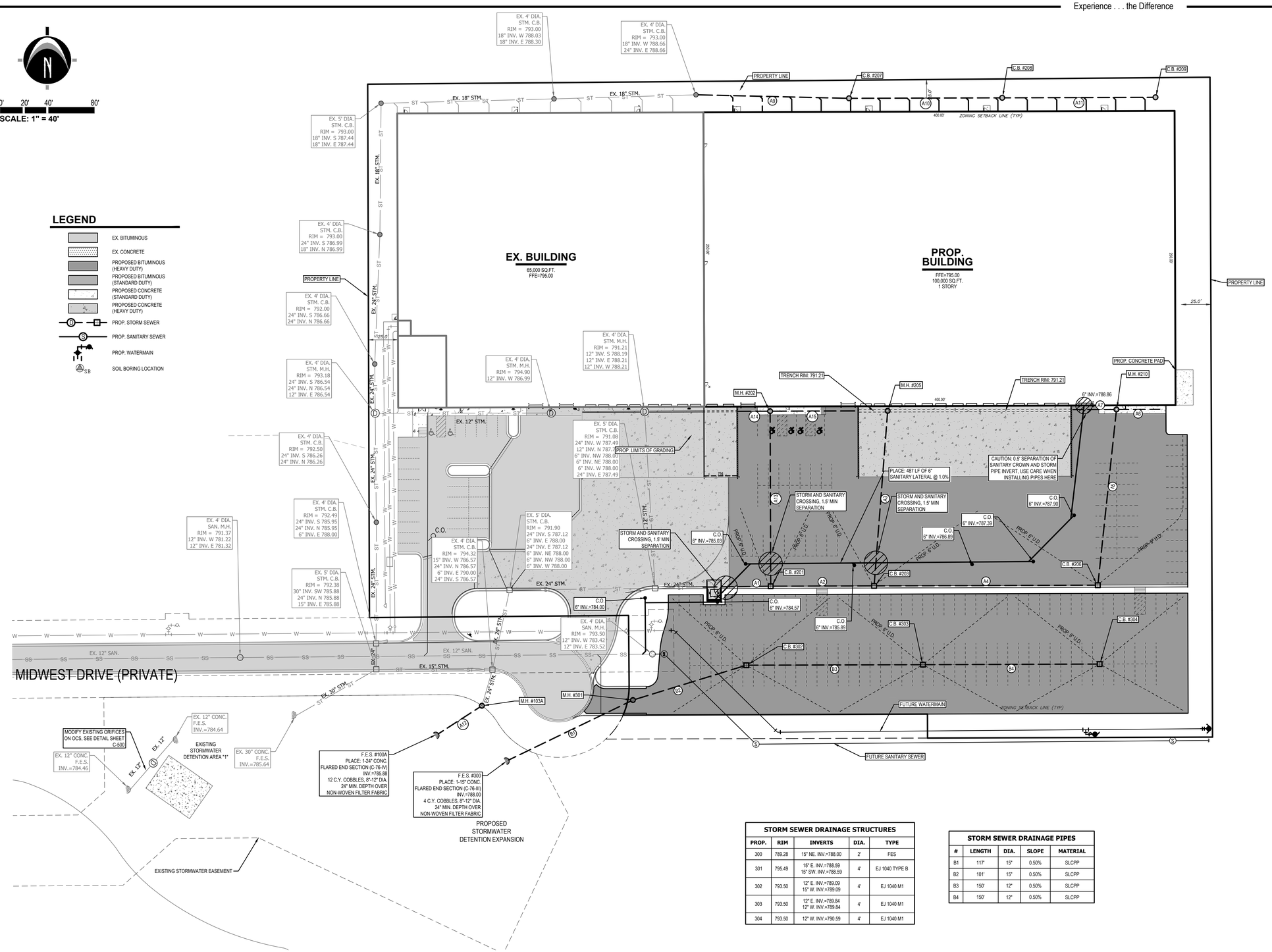

STORM SEWER DRAINAGE STRUCTURES				
PROP.	RIM	INVERTS	DIA.	TYPE
100A	787.94	24" NE. INV.=785.88	2'	FES
103A	790.81	24" N. INV.=786.12 24" SW. INV.=786.12	4'	EJ 1040 TYPE B
201	792.40	24" E. INV.=787.78 6" NE. INV.=788.98 12" N. INV.=787.78 6" NW. INV.=788.98 24" W. INV.=787.78	5'	EJ 7045 M1
202	794.93	12" E. INV.=788.23 12" W. INV.=788.23 12" S. INV.=788.23	4'	EJ 1040 B
203	792.30	18" E. INV.=788.04 15" N. INV.=788.04 6" NE. INV.=789.24 6" NW. INV.=789.24 24" W. INV.=788.04	4'	EJ 7045 M1
205	791.21	12" E. INV.=788.48 12" W. INV.=788.48 15" S. INV.=788.48	4'	EJ 1040 TYPE B
206	792.06	12" N. INV.=788.70 6" NW. INV.=789.68 6" NE. INV.=789.68 18" W. INV.=788.70	5'	EJ 7045 M1
207	793.00	15" E. INV.=789.05 15" W. INV.=789.05	4'	EJ 1040 TYPE N
208	793.00	12" E. INV.=789.44 15" W. INV.=789.44	4'	EJ 1040 TYPE N
209	793.00	12" W. INV.=789.83	4'	EJ 1040 TYPE N
210	794.94	8" E. INV.=789.15 8" W. INV.=790.15 12" S. INV.=789.15	4'	EJ 1040 TYPE B

STORM SEWER DRAINAGE PIPES				
#	LENGTH	DIA.	SLOPE	MATERIAL
A1	57'	24"	0.30%	C-76-IV
A2	88'	24"	0.30%	C-76-IV
A3	149'	15"	0.30%	C-76-IV
A4	190'	18"	0.35%	C-76-IV
A5	150'	12"	0.30%	SLCPP
A6	37'	8"	1.00%	SLCPP
A7	37'	8"	1.44%	SLCPP
A9	130'	15"	0.30%	SLCPP
A10	130'	15"	0.30%	SLCPP
A11	130'	12"	0.30%	SLCPP
A12	44'	24"	0.55%	SLCPP
A13	149'	12"	0.30%	C-76-IV
A14	27'	12"	0.30%	SLCPP
A15	72'	12"	0.24%	SLCPP

STORM SEWER DRAINAGE STRUCTURES				
PROP.	RIM	INVERTS	DIA.	TYPE
300	789.28	15" NE. INV.=788.00	2'	FES
301	795.49	15" E. INV.=788.59 15" SW. INV.=788.59	4'	EJ 1040 TYPE B
302	793.50	12" E. INV.=789.09 15" W. INV.=789.09	4'	EJ 1040 M1
303	793.50	12" E. INV.=789.84 12" W. INV.=789.84	4'	EJ 1040 M1
304	793.50	12" W. INV.=790.59	4'	EJ 1040 M1

STORM SEWER DRAINAGE PIPES				
#	LENGTH	DIA.	SLOPE	MATERIAL
B1	117'	15"	0.50%	SLCPP
B2	101'	15"	0.50%	SLCPP
B3	150'	12"	0.50%	SLCPP
B4	150'	12"	0.50%	SLCPP

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5784 Kraft Avenue SE

Utility Plan

PART OF THE SW 1/4 OF SECTION 32, T6N, R10W, CASCADE TOWNSHIP, KENT COUNTY, MICHIGAN

STAMP:
STATE OF MICHIGAN
ROGER JACK BARR II
ENGINEER
No. 41990
LICENSED PROFESSIONAL ENGINEER

PROJECT NO:
22400770

SHEET NO:
C-400

22400770-CPI.dwg TW 3/20/2023 12:20

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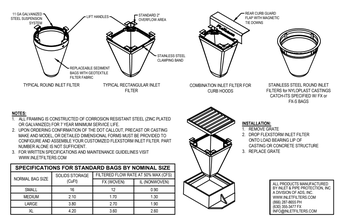


NOTES:
1. ALL FRAMING IS CONSTRUCTED OF CORROSION RESISTANT STEEL (ZINC PLATED OR GALVANIZED) FOR 1 YEAR MINIMUM SERVICE LIFE
2. UPON ORDERING CONFIRMATION OF THE DOT CALLOUT, PRECAST OR CASTING SPECIFIC DIMENSIONS, WE WILL ADJUST THE FILTER DIMENSIONS TO CONFIGURE AND ASSEMBLE YOUR CUSTOMIZED FLEXSTORM INLET FILTER. PART NUMBER ALONE IS NOT SUFFICIENT
3. FOR WRITTEN SPECIFICATIONS AND MAINTENANCE GUIDELINES VISIT WWW.INLETFILTERS.COM

SPECIFICATIONS FOR STANDARD BAGS BY NOMINAL SIZE			
NOMINAL BAG SIZE	SOLIDS STORAGE (CuFt)	FILTERED FLOW RATE AT 50% MAX (CFS)	
		Fit (WOVEN)	S (NONWOVEN)
SMALL	.76	1.2	0.30
MEDIUM	2.10	1.70	1.00
LARGE	3.80	2.70	1.90
XL	4.20	3.60	2.60

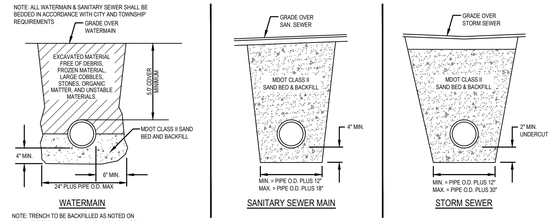
INSTALLATION:
1. REMOVE GRATE
2. DROP FLEXSTORM INLET FILTER ONTO CAID BEARING LIP OF CASTING OR CONCRETE STRUCTURE
3. REPLACE GRATE

ALL PRODUCTS MANUFACTURED BY HALE & PIPE PROTECTION, INC. 800 SOUTH 8TH STREET WWW.INLETFILTERS.COM (866) 397-8600 PH (920) 356-5075 FX INFO@INLETFILTERS.COM

FLEXSTORM INLET FILTER DETAIL

N.T.S.

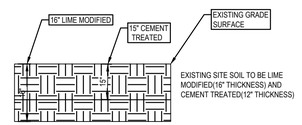
NOTE: ALL WATERMAIN & SANITARY SEWER SHALL BE BEDDED IN ACCORDANCE WITH CITY AND TOWNSHIP REQUIREMENTS



NOTE: TRENCH TO BE BACKFILLED AS NOTED ON DETAIL EXCEPT WHEN W.M. IS WITHIN PAVED AREAS. IN PAVED AREAS W.M. SHALL HAVE FULL SAND BACKFILL.

TYPICAL UTILITY TRENCH AND BACKFILL DETAILS

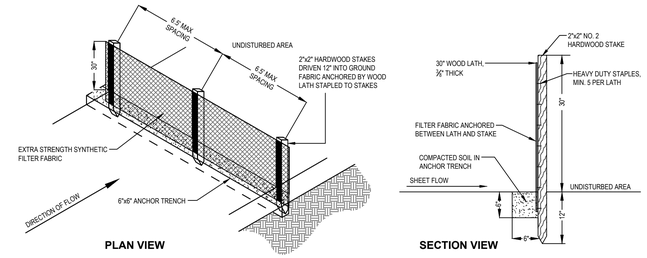
N.T.S.



NOTE:
REFER TO WADEL STABILIZATION RECOMMENDATIONS DATED 11/17/22

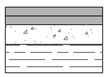
SOIL IMPROVEMENT DETAILS

N.T.S.



SILT FENCE DETAIL

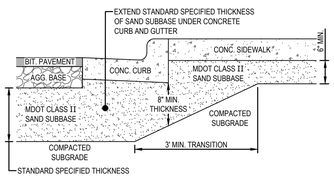
N.T.S.



1.5" MDOT 4E1 BASE COURSE
1.5" MDOT 4E1 WEARING COURSE
4" MDOT CLASS 21AA AGGREGATE BASE
LINE MODIFIED AND CEMENT MODIFIED SUB BASE. SEE DETAILS THE SHEET

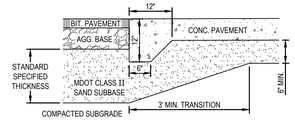
PROPOSED PAVEMENT DETAILS

N.T.S.



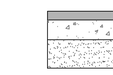
PAVEMENT SUBBASE TRANSITION DETAIL B

N.T.S.



PAVEMENT SUBBASE TRANSITION DETAIL A

N.T.S.

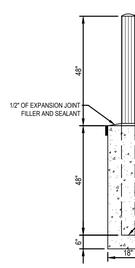


4" MDOT BIT. PAVING (TWO COURSES)
8" MDOT CLASS 21AA GRAVEL BASE
12" MDOT CLASS 2 SAND SUBBASE

NOTE:
1. REFER TO GEOTECHNICAL REPORT FOR FINAL PAVEMENT DESIGN SPECIFICATION
2. HMA MIXTURE TO BE TIER I OR TIER II
3. BINDER GRADE TO BE A MINIMUM OF PG 58-28

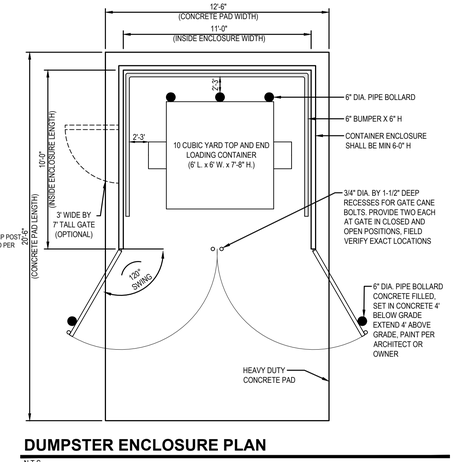
HEAVY DUTY PAVEMENT CROSS SECTION

N.T.S.



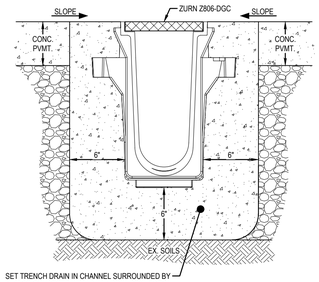
BOLLARD DETAIL

N.T.S.



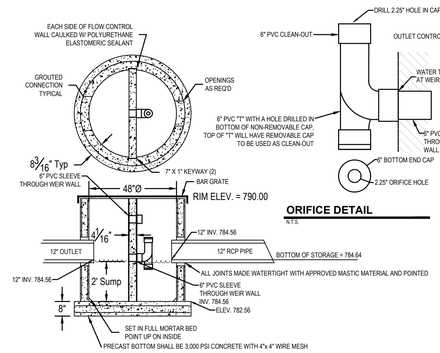
DUMPSTER ENCLOSURE PLAN

N.T.S.



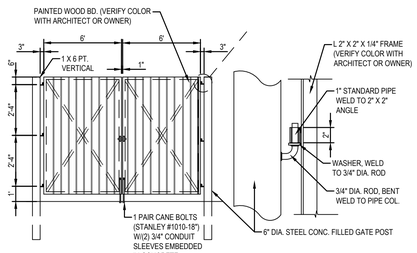
TRENCH DRAIN DETAIL

N.T.S.



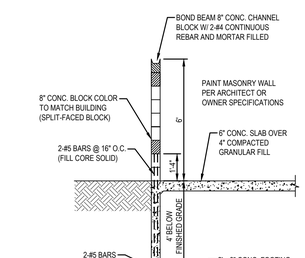
48"Ø PRECAST OUTLET CONTROL STRUCTURE - BASIN

N.T.S.



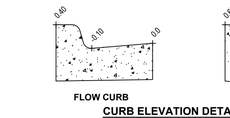
DUMPSTER ENCLOSURE GATE DETAIL

N.T.S.



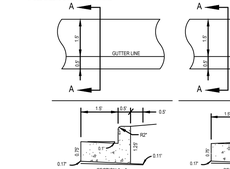
DUMPSTER ENCLOSURE WALL SECTION DETAIL

N.T.S.



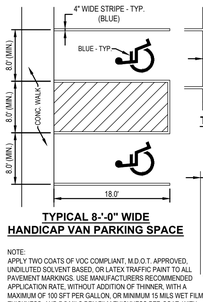
CURB ELEVATION DETAILS

GRADING NOTES:
1. ESTABLISH PERMANENT BENCH MARK ON SITE PRIOR TO GRADING.
2. PROVIDE SPOT GRADES AND THE CORRELATION OF PAVEMENT UNLESS OTHERWISE NOTED. THE VERTICAL DIFFERENCE BETWEEN PAVEMENT GRADES AND TOP OF CURB GRADES VARY FOR FLOW AND SPILL CURB (SEE DETAIL THIS SHEET).
3. PROVIDE ADA ROUTE SHALL MEET THE STANDARDS SET FORTH IN THE ADA ACCESSIBILITY GUIDELINES FOR BUILDING AND FACILITIES - APPENDIX A TO PART 1191
4. SEE SHEET C-300 FOR LOCATIONS



24" CONCRETE CURB AND GUTTER DETAIL

N.T.S.



TYPICAL 90° INTERNAL PARKING SPACE

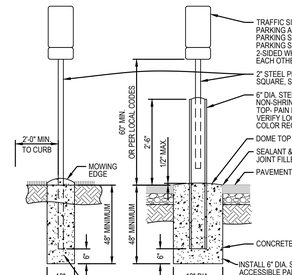
TYPICAL 8'-0" WIDE HANDICAP VAN PARKING SPACE

TYPICAL 90° PERIMETER PARKING SPACE

NOTE:
APPLY TWO COATS OF VOC COMPLIANT, M.D.O.T. APPROVED, UNDILUTED SOLVENT BASED, OR LATEX TRAFFIC PAINT TO ALL PAVEMENT MARKINGS. USE MANUFACTURERS RECOMMENDED APPLICATION RATE, WITHOUT ADDITION OF THINNER, WITH A MAXIMUM OF 100 SFT PER GALLON, OR MINIMUM 15 MILS WET FILM THICKNESS, AND 7.5 MILS DRY FILM THICKNESS PER COAT, WITH MINIMUM 30 DAYS BETWEEN APPLICATIONS. SECOND COAT MUST NOT BE APPLIED EARLIER THAN 7 DAYS BEFORE OCCUPANCY.

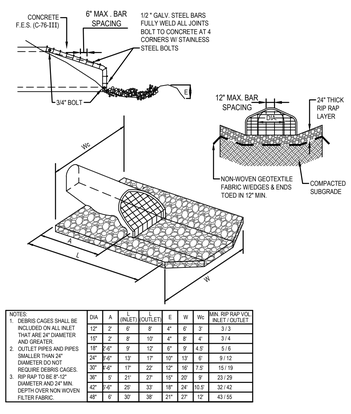
PAVEMENT MARKING DETAILS

N.T.S.



PARKING LOT SIGNAGE DETAIL

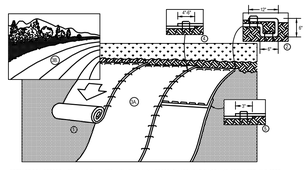
N.T.S.



NOTES: 1. DEBRIS CAGES SHALL BE INCLUDED ON ALL INLET THAT ARE 24" DIAMETER AND GREATER. 2. OUTLET PIPES AND PIPES SMALLER THAN 24" DIAMETER DO NOT REQUIRE DEBRIS CAGES. 3. RIP-RAP TO BE 8"-12" DIAMETER AND 24" MIN. DEPTH OVER NON WOVEN FILTER FABRIC.	DIA	A	INLET	OUTLET	E	W	Wc	MIN. RIP RAP VOL INLET / OUTLET
	12"	2'	6'	8'	4"	6'	3'	3 / 3
	15"	2'	8'	10'	4"	8'	4'	3 / 4
	18"	2'-6"	11'	12'	6"	10'	4.5'	5 / 6
	24"	3'-6"	13'	17'	10"	13'	6'	9 / 12
	30"	4'-6"	17'	22'	12"	16'	7.5'	15 / 19
	36"	5'	21'	27'	15"	20'	9'	23 / 29
	42"	5'-6"	25'	33'	18"	24'	10.5'	32 / 42
	48"	6'	30'	38'	21"	27'	12'	43 / 55

CONCRETE F.E.S. RIP RAP APRON AND DEBRIS CAGE DETAIL

N.T.S.

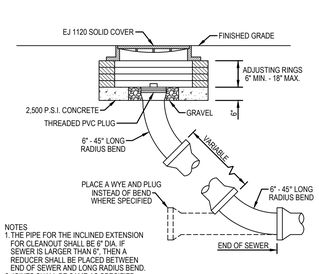


1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS PER MANUFACTURES RECOMMENDATION.
4. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR OVERLAP (APPROXIMATELY 4" 6" OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE ONE(APPROXIMATELY BLANKET BEING INSTALLED ON TOP) EVEN WITH THE SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3'OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12"APART ACROSS ENTIRE BLANKET WIDTH.
6. PLACE STAPLES/STAKES PER MANUFACTURE RECOMMENDATION FOR THE APPROPRIATE SLOPE BEING APPLIED.

NOTES:
1. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.
2. FOLLOW EROSION CONTROL TECHNOLOGY COUNCIL SPECIFICATION FOR PRODUCT SELECTION

EROSION CONTROL BLANKET

N.T.S.



NOTES
1. THE PIPE FOR THE INCLINED EXTENSION FOR CLEANOUT SHALL BE 6" DIA. IF SEWER IS LARGER THAN 6", THEN A REDUCER SHALL BE PLACED BETWEEN END OF SEWER AND LONG RADIUS BEND.
2. JOINTS SHALL BE SAME AS SPECIFIED FOR SEWER CONSTRUCTION

SEWER CLEANOUT IN PAVEMENT DETAIL

N.T.S.

CONSTRUCTION NOTES

STORM SEWER

1. ALL CATCH BASINS SHOULD BE PROVIDED WITH A MINIMUM 2' SUMP.
2. ALL STORM SEWER SHALL BE SMOOTH LINED CORRUGATED POLYETHYLENE PIPE (SLCPP), WITH WATERTIGHT JOINTS MEETING THE REQUIREMENTS OF THE MICHIGAN PLUMBING CODE, AASHTO M-252 AND M-294, ASTM F-2306, F-2648, D-3212, F-477, F-2487, D-3350 AND F-1417. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS AND ASTM D-2321 OR CONCRETE PIPE MEETING THE REQUIREMENTS OF ASTM C-76-III UNLESS OTHERWISE NOTED
3. 6" UNDERDRAIN SHALL BE PERFORATED PIPE WITH SOCK, MEETING THE REQUIREMENTS OF AASHTO M-278 AND GEOTEXTILE SHALL MEET AASHTO M-288 REQUIREMENTS.
4. ALL FLARED END SECTIONS SHALL BE CONCRETE.
5. ALL CATCH BASINS AND MANHOLES SHALL BE CONCRETE, CONFORMING TO ASTM C-478 WITH BUTYL RUBBER GASKETED JOINTS OR BOOT TYPE PIPE CONNECTIONS CONFORMING TO ASTM C-923 FOR ALL PIPE CONNECTIONS 24" DIAMETER AND SMALLER.
6. ALL CATCH BASINS ARE DRAWN AND WILL BE STAKED AT CENTER OF CASTING.

WATERMAIN AND SANITARY SEWER

1. ALL WATERMAIN AND SANITARY SEWER CONSTRUCTION SHALL CONFORM TO THE CITY AND TOWNSHIP STANDARD CONSTRUCTION SPECIFICATIONS, INCLUDING POST CONSTRUCTION VIDEO INSPECTION OF THE SANITARY SEWER SYSTEM.

GENERAL

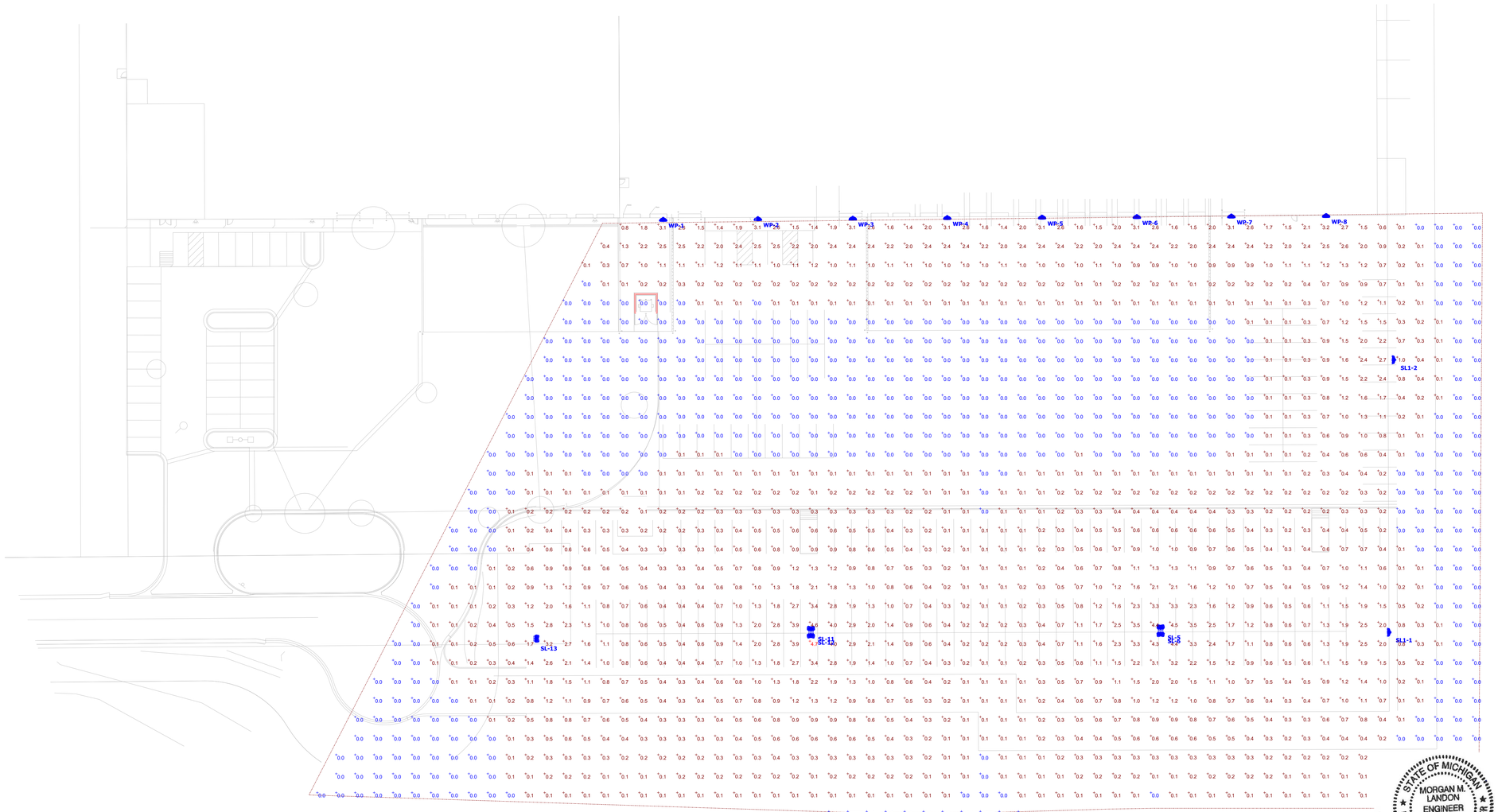
1. ALL CONSTRUCTION AND MATERIAL SPECIFICATIONS INCLUDED FOR THIS PROJECT SHALL BE IN ACCORDANCE WITH THE MDOT CONSTRUCTION AND MATERIALS SPECIFICATIONS (LATEST EDITION) AND THE ORDINANCES OF THE CITY AND TOWNSHIP. WHERE CONFLICTS OCCUR IN THE ABOVE, THE CITY AND TOWNSHIP SHALL BE THE GOVERNING AUTHORITY.
2. SOIL BORINGS HAVE BEEN PERFORMED BY THE OWNER AND SHALL BE PROVIDED TO THE CONTRACTOR. VARIATION IN EXISTING SOIL CONDITIONS MAY IMPACT THE EARTHWORK QUANTITIES IF UNSUABLE SOILS ARE ENCOUNTERED DURING CONSTRUCTION.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES TO THE EXISTING WATER AND SEWAGE SYSTEM RESULTING FROM NON-CONFORMANCE WITH THE APPLICABLE STANDARDS OR THROUGH GENERAL NEGLIGENCE.
4. ALL WORK, INCLUDING INSPECTIONS AND TESTING COST REQUIRED FOR REMOVAL, RELOCATION OR NEW CONSTRUCTION FOR PRIVATE OR PUBLIC UTILITIES, WILL BE DONE BY AND AT THE EXPENSE OF THE CONTRACTOR AND INCLUDED IN THE BID PRICE FOR THE VARIOUS WORK ITEMS UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL NECESSARY PERMITS FROM THE CITY AND TOWNSHIP AND COUNTY AND ANY OTHER AGENCY FOR ALL WORK DONE BY THE CONTRACTOR.
5. ANY DEFECTS IN THE CONSTRUCTION, INCLUDING MATERIALS OR WORKMANSHIP, SHALL BE REPLACED OR CORRECTED BY REMOVAL AND REPLACEMENT OR OTHER APPROVED METHODS PRIOR TO ACCEPTANCE BY THE CITY AND TOWNSHIP OR OWNER WITHOUT ANY ADDITIONAL COST TO THE CITY AND TOWNSHIP OR OWNER.
6. ALL LAWN AREAS REMOVED OR DISTURBED SHALL BE REPLACED WITH TOPSOIL AND SOD WHERE NEEDED AND SHALL BE RESEEDED AND MULCHED IF SATISFACTORY RE-ESTABLISHMENT OF LAWN DOES NOT OCCUR.
7. ALL PUNCH LIST AND DEFICIENCY WORK SHALL BE COMPLETED WITH 1 MONTH OF THE END OF CONSTRUCTION.
8. THE CONTRACTOR SHALL OBTAIN A STREET OPENING PERMIT FROM THE CITY AND TOWNSHIP BEFORE BEGINNING WORK WITHIN ANY PUBLIC STREET RIGHT-OF-WAY.
9. THE CONTRACTOR SHALL MAINTAIN A CURRENT SET OF CONSTRUCTION DRAWINGS ON SITE AT ALL TIMES.
10. THESE PLANS HAVE BEEN DEVELOPED FOR ELECTRONIC FIELD LAYOUT. DIMENSIONS SHOWN ARE FOR GRAPHIC PRESENTATION ONLY AND SHOULD NOT BE USED FOR LAYOUT. CONTACT THE ENGINEER IF ANY DISCREPANCIES BETWEEN THE PLAN AND ELECTRONIC DATA ARE DISCOVERED.
11. THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY LIGHTS, BARRICADES, FLAGMEN, ETC. AS REQUIRED TO PERFORM THE REQUIRED WORK. THE INSTALLATION AND OPERATION OF ALL TEMPORARY TRAFFIC CONTROL AND TEMPORARY TRAFFIC CONTROL DEVICES AS REQUIRED SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS. THE CONTRACTOR SHALL FURNISH, ERECT, MAINTAIN AND SUBSEQUENTLY REMOVE SUCH ADDITIONAL TRAFFIC CONTROL DEVICES LOCATED OUTSIDE THE LIMITS OF CONSTRUCTION AS ARE REQUIRED ON THOSE STREETS WHICH ARE USED AS DETOURS, INCLUDING 'ROAD CLOSED' SIGNS AND BARRICADES AT THE POINT WHERE THE ROAD IS CLOSED TO THROUGH TRAFFIC.
12. THE CONTRACTOR SHALL PROTECT LOCATION OF ALL PROPERTY PINS AND BENCHMARKS.
13. ALL WORK CONTEMPLATED SHALL AT ALL TIMES BE SUBJECT TO THE DIRECT INSPECTION OF THE CITY AND TOWNSHIP, OWNER AND THEIR REPRESENTATIVES. THE CITY AND TOWNSHIP AND OWNER RESERVES THE RIGHT TO HALT ALL CONSTRUCTION ACTIVITY FOR NONCONFORMANCE OF PLANS, SPECIFICATIONS AND OTHER APPLICABLE STANDARDS OR REGULATIONS.
14. PRICES BID PER FOOT FOR ALL PIPES IS COMPACTED IN PLACE REGARDLESS OF SOIL OR ROCK CONDITIONS.
15. CONTRACTOR IS RESPONSIBLE FOR ALL SIGNS, BARRICADES AND SAFETY FENCES TO DETER PEOPLE FROM ENTERING THE WORK AREA AND FOR MAINTAINING AND PROTECTING THE FLOW OF VEHICULAR AND PEDESTRIAN TRAFFIC AROUND THE JOB SITE. TRAFFIC CONTROLS SHALL BE COORDINATED WITH THE POLICE DEPARTMENT AND THE CITY AND TOWNSHIP.
16. PRIOR TO ANY CONSTRUCTION ON GRADING, A PROTECTIVE BARRIER, FENCE, POST AND/OR SIGNS CLEARLY INDICATING LIMITS OF WORK/DISTURBANCE SHALL BE INSTALLED INDICATING NO TREE REMOVAL OR DISTURBANCES OUTSIDE LIMITS, THE CITY AND TOWNSHIP AND OWNER SHALL BE CONTACTED UPON DETERMINATION OF LIMITS IN THE FIELD.
17. ALL ROAD SURFACES, EASEMENTS OR RIGHT-OF-WAYS DISTURBED BY CONSTRUCTION OF ANY PART OF THIS IMPROVEMENT ARE TO BE RESTORED COMPLETELY TO THE SATISFACTION OF THE CITY AND TOWNSHIP AND THE OWNER.
18. NO PARKING OF CONTRACTOR OR CONTRACTOR EMPLOYEE'S VEHICLES ON ANY PUBLIC STREETS SHALL BE PERMITTED.
19. ALL DISTURBED SIGNS, GUARDRAILS, MAIL BOXES, AND DRIVEWAYS SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE CITY AND TOWNSHIP AND THE OWNER.
20. DUST CONTROL: THE CONTRACTOR SHALL SUPPLY ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY SUCH AS CALCIUM CHLORIDE, WATER OR A MOTORIZED DUST-FREE STREET SWEEPING DEVICE TO MAINTAIN ALL ROADWAYS BEING USED FOR ACCESS TO THE CONSTRUCTION SITE AND SHALL ADHERE TO ALL ORDINANCES OF THE CITY AND TOWNSHIP, COUNTY, MDEQ OR ANY OTHER GOVERNING AUTHORITY.
21. ALL SEWERS, MANHOLES, JUNCTION CHAMBERS AND INLET BASINS MUST BE CLEANED BEFORE ACCEPTANCE BY THE CITY AND TOWNSHIP AND OWNER.
22. IF MUD, SOIL OR OTHER DEBRIS IS DEPOSITED ON ADJACENT STREETS, ROADS OR OTHER PROPERTY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF SUCH AT THE END OF EACH WORK DAY OR AS REQUIRED DURING THE WORK DAY.
23. ADJUST TO GRADE OR RECONSTRUCT TO GRADE WORK SHALL INCLUDE THE REMOVAL AND REPLACEMENT OF ANY EXISTING CONCRETE BLOCKOUT PAVEMENT, DAMAGED PAVEMENT DOWELS OR OTHER SUCH LOAD TRANSFERS DEVICES SHALL BE REPLACED AS DIRECTED BY THE COUNTY AND THE ENGINEER.
24. ALL EXISTING CASTINGS FOR STRUCTURES TO BE ADJUSTED OR RECONSTRUCTED TO GRADE SHALL BE FIELD CHECKED AT THE TIME OF CONSTRUCTION AND MARKED SUITABLE FOR SALVAGE AND REUSE OR REPLACED.
25. COMPACTED PREMIUM BACKFILL (MDOT CLASS II SAND) WILL BE REQUIRED AT ALL FILL AREAS OR ANY STREETS WHERE REMOVAL AND REPLACEMENT OF PAVEMENT IS REQUIRED AND FOR ALL UNDERGROUND CONSTRUCTION UNDER ANY DRIVEWAY OR PAVEMENT INCLUDING THE 45 DEGREE ANGLE OF INFLUENCE FROM THE OUTSIDE EDGE OF PAVEMENT OR TOP OF CURB. COMPACTION TESTS SHALL BE REQUIRED EVERY 50 FEET UNDER PAVEMENT. PAVEMENT INCLUDES, BUT NOT LIMITED TO, ROADWAY SURFACES, SIDEWALKS, BIKE WAYS, DRIVEWAYS, SHOULDERS, BUILDINGS, ETC.
26. NO BUILDING MATERIAL, EQUIPMENT, VEHICLES OR CHEMICALS SHALL BE STORED OR PLACED OUTSIDE LIMITS OF WORK/DISTURBANCE.
27. STORMWATER POLLUTION PREVENTION ITEMS SHALL BE IN PLACE PRIO

Luminaire Locations

		Location						Aim		
No.	Label	X	Y	Z	MH	Orientation	Tilt	X	Y	Z
6	SL	4178.83	4500.38	25.00	25.00	180.00	0.00	4178.83	4500.38	0.00
1	SL1	4300.19	4500.43	25.00	25.00	270.00	0.00	4300.19	4500.43	0.00
11	SL	3994.26	4501.43	25.00	25.00	0.00	0.00	3994.26	4501.43	0.00
12	SL	3994.25	4499.58	25.00	25.00	180.00	0.00	3994.25	4499.58	0.00
2	SL1	4302.72	4644.36	25.00	25.00	270.00	0.00	4302.72	4644.36	0.00
13	SL	3848.51	4497.08	25.00	25.00	90.00	0.00	3848.51	4497.08	0.00
1	WP	3916.27	4719.23	16.00	16.00	180.00	0.00	3916.27	4719.23	0.00
2	WP	3966.27	4719.60	16.00	16.00	180.00	0.00	3966.27	4719.60	0.00
3	WP	4016.38	4719.85	16.00	16.00	180.00	0.00	4016.38	4719.85	0.00
4	WP	4066.24	4720.17	16.00	16.00	180.00	0.00	4066.24	4720.17	0.00
5	WP	4116.29	4720.40	16.00	16.00	180.00	0.00	4116.29	4720.40	0.00
6	WP	4166.32	4720.70	16.00	16.00	180.00	0.00	4166.32	4720.70	0.00
7	WP	4216.21	4720.99	16.00	16.00	180.00	0.00	4216.21	4720.99	0.00
8	WP	4266.22	4721.28	16.00	16.00	180.00	0.00	4266.22	4721.28	0.00
5	SL	4178.84	4502.22	25.00	25.00	0.00	0.00	4178.84	4502.22	0.00

Schedule

Symbol	Label	Image	Quantity	Manufacturer	Catalog Number	Lamp	Number Lamps	Filename	Lumens Per Lamp	Light Loss Factor	Wattage	Efficiency	Distribution	Polar Plot	Notes	Description
	SL		5	Lithonia Lighting	RSX1 LED P2 40K R4		1	RSX1_LED_P2_40K_R4.ies	9972	1	72.95	100%	TYPE IV, SHORT, BUG RATING: B2 - U0 - G2			RSX Area Fixture Size 1 P2 Lumen Package 4000K CCT Type R4 Distribution
	SL1		2	Lithonia Lighting	RSX1 LED P2 40K R4 HS		1	RSX1_LED_P2_40K_R4_HS.ies	6554	1	72.95	100%	TYPE III, SHORT, BUG RATING: B1 - U0 - G2			RSX LED Area Luminaire Size 1 P2 Lumen Package 4000K CCT Type R4 Distribution with HS shield
	WP		8	Lithonia Lighting	KAXW LED P1 40K R3 MVOLT	LED	1	KAXW_LED_P1_40K_R3_MVOLT.ies	3545	1	29	100%	TYPE III, SHORT, BUG RATING: B1 - U0 - G1			KAXW LED, PERFORMANCE PACKAGE 1, 4000K, TYPE 3 , 120-277V



MORGAN M. LANDON, PE, LLC
2054 Brandon Drive NW
Grand Rapids, Michigan 49504
616-890-9321
morgan@mlandon.com

STATE OF MICHIGAN
MORGAN M. LANDON
ENGINEER
No. 23530
LICENSED PROFESSIONAL ENGINEER

Morgan Landon
03.15.23

VISUAL

New Addition for: Potential Tenant 5784 Kraft SE

Designer
MML
Date
03-15-2023
Scale
1" = 30' - 0"
Drawing No.

Summary

CASCADE CHARTER TOWNSHIP

5920 Tahoe Drive SE Grand Rapids, Michigan 49546-7140

Date March 31, 2023
To Brian Hilbrands
From Aric Thorne, PE
Subject Site Plan Review: 5784 Kraft Ave LLC, 5784 Kraft Ave SE

I have reviewed the site plan for 5784 Kraft Ave LLC by Nederveld. The applicant is proposing the expansion of an existing parking lot to supplement an approved building addition.

Stormwater and Drainage

The proposed project is being reviewed under the 2022 Stormwater Ordinance and the criteria in the Stormwater Standards Manual revised March 2021.

An existing industrial warehouse; parking lot; and detention basin are situated on multiple parcels with addresses 5784 and 5824 Kraft Ave SE. An addition to the warehouse has been previously approved and this project is to extend the existing lot. The basin and its expansion are located in a recorded easement agreement that provides for shared access, utilities, and stormwater management between these two properties and the undeveloped parcel at 5726 Kraft Ave SE.

The project site is in Flood Control Zone 2, requiring detention for the 25-year storm with a maximum release rate of 0.13-cfs. The existing basin is being expanded to accommodate the increased runoff due to the impervious surface. The proposed lot expansion totals 1.07-acres. The existing private storm sewer system will be expanded. This system and the detention basin serve as stormwater controls on the site.

Flood Control

The applicant provided supporting calculations for the increased runoff and expanded detention basin design. 12-inch to 15-inch diameter sewer conveys storm water from three 48-inch diameter catch basins in the lot through a 15-inch diameter outlet into the basin. 6-inch underdrain will be installed under the lot and into each basin. An emergency spillway allows for the 100-year storm event. This utilizes an existing pond located southwest of the basin that drains to the west by open channel and 36-inch culvert under Kraft Ave SE.

Water Quality and Channel Protection

Water quality and channel protection are provided through the expanded detention basin. The outlet features a rip rap apron and debris cage. The expanded basin design allows for the

increased runoff volume to accommodate for the 25-year storm event; for minimum 1-foot of freeboard above the calculated required storage volume; and includes the aforementioned emergency overflow route.

Drainage Plan

The applicant has submitted plans with existing topography; proposed grading for the detention basin; and drainage patterns within the lot.

There is an existing easement agreement (202212280095320), including terms for stormwater use, between the subject and two neighboring parcels:

Address	**Property Owner**
5874 Kraft Ave SE	5784 Kraft Ave LLC
5824 Kraft Ave SE	Kraft Avenue Properties LLC
5726 Kraft Ave SE	EQ Real Estate LLC

The existing storm water runoff facility maintenance agreement (20190820-0062326) between 5784 Kraft Ave LLC and the Township should be amended prior to construction to include **all** property owners and to reflect the standards of the current storm water ordinance. This includes providing a maintenance plan, schedule, and tracking of compliance.

Utilities and General Comments

12-inch to 15-inch sewer and 6-inch underdrain is proposed to be installed as part of conveyance system from the lot to detention basin. The lot will be accessible by the private road Midwest Drive. Water main and sanitary sewer are stubbed in the approximate area of the proposed lot. Future expansion is anticipated to cross the proposed storm sewer.

Soil Erosion and Sedimentation Control

Applicant indicated limits of disturbance and provided the following measures: permanent/temporary seeding, rip rap, gravel access approach, geotextile silt fence, inlet protection, and mulch blanket. Kent County Road Commission must review and approve plans and issue a soil erosion and sedimentation control permit before construction may begin.

Summary

The proposed stormwater management design meets the Township Stormwater Ordinance requirements for the site location. I recommend approval from an engineering standpoint.

Let me know if you have any questions or concerns.