

AGENDA
Cascade Charter Township Planning Commission
Monday, March 5, 2018
7:00 pm
Cascade Library Wisner Center
2870 Jacksmith Ave. SE

- 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. Approve the Minutes of the February 19, 2018 meeting**
- ARTICLE 5. Acknowledge visitors and those wishing to speak to non-agenda items.**
(Comments are limited to five minutes per speaker.)
- ARTICLE 6. Case # 18-3439 Aaron McConnell/ Morton Buildings**
Public Hearing
Property Address: 5470 McCords Ave SE
Requested Action: The Applicant is requesting a special use permit to construct
an accessory building over 832 sq. ft.
- ARTICLE 7. Case # 18:3438 ADAC Automotive**
Property Address: 5670 &5716 Eagle Dr SE
Requested Action: The Applicant is requesting Site Plan Review for an
addition and new building.
- ARTICLE 8. Any other business**
- ARTICLE 9. Adjournment**

Meeting format

- | | |
|---|---|
| 1. Staff Presentation | <i>Staff report and recommendation</i> |
| 2. Project presentation- | <i>Applicant presentation and explanation of project</i> |
| a. PUBLIC HEARINGS | |
| i. Open Public Hearing. | <i>Comments are limited to five minutes per speaker; exception may be granted by the chair for representative speakers and applicants</i> |
| ii. Close public hearing | |
| 3. Commission discussion – May ask for clarification from applicant, staff or public | |
| 4. Commission decision - Options | |
| a. Table the decision | <i>d. Approve with conditions</i> |
| b. Deny | <i>e. Recommendation to Township Board</i> |
| c. Approve | |

MINUTES
Cascade Charter Township
Planning Commission
Monday, February 19, 2018
7:00 P.M.

ARTICLE 1. Chairman Sperla called the meeting to order at 7:00 P.M.
Members Present: Johnson, Katsma, Noordyke, Pennington, Rissi and Robinson
Members Absent: Lewis, Williams (resigned)
Others Present: Community Development Director, Steve Peterson and those listed on the sign in sheet.

ARTICLE 2. Pledge of Allegiance.

ARTICLE 3. Approve the current Agenda.

Motion was made by Member Rissi to approve the Agenda. Supported by Member Pennington. Motion carried 7 to 0.

ARTICLE 4. Approve the Minutes of the January 8, 2018 meeting.

Motion was made by Member Johnson to approve the minutes of January 8, 2018 (with noted corrections). Supported by Member Rissi. Motion carried 7 to 0.

ARTICLE 5. Approve the Minutes of the February 5, 2018 meeting.

Motion was made by Member Rissi to approve the minutes of February 5, 2018. Supported by Member Johnson. Motion carried 7 to 0.

ARTICLE 6. Acknowledge visitors and those wishing to speak to non-agenda items.

Mr. Ken Carey came forward to speak in regards to a lawsuit that he had with a neighbor regarding storm water.

ARTICLE 7. Case #17-3421 Lacks Enterprises

Property Address: 5460 Cascade Road

Requested Action: Recommendation to the Township Board for approval of the Golfview PUD amendment to allow short and mid-term lodging building for Lacks Enterprises.

Director Peterson noted that at the Public Hearing on February 5, 2018, the Planning Commission awarded preliminary approval of the site plan and instructed staff to write the PUD amendment for the project. The PUD amendment has been reviewed by Applicant and addresses all of their comments, as well as the approval from the Planning Commission.

Director Peterson recommends that the Planning Commission forward a positive recommendation to the Township Board for approval of the PUD amendment and site plan.

Chairman Sperla invited the Applicant to come forward with any comments.

Applicant offered no additional comments.

Motion was made by Member Noordyk to forward a positive recommendation to the Township Board for approval of the PUD amendment and site plan. Supported by Member Johnson. Motion carried 7 to 0.

ARTICLE 8. Adjournment

Motion was made by Member Johnson to adjourn. Supported by Member Robinson. Motion carried 7 to 0. The meeting was adjourned at 7:15 p.m.

Respectfully submitted,
Phil Johnson, Secretary

STAFF REPORT

STAFF REPORT: Case #18-3439
REPORT DATE: February 19, 2018
PREPARED FOR: Cascade Charter Township Zoning Board of Appeals
MEETING DATE: March 5, 2018
PREPARED BY: Steve Peterson, Planning Director

APPLICANT:
Aaron McConnell
4747 14 Mile Rd
Rockford MI 49341

STATUS
OF APPLICANT: Property Owner

REQUESTED ACTION: The applicant is requesting a special use permit to construct an accessory building over 832 sq ft.

EXISTING ZONING OF
SUBJECT PARCEL(S): ARC

GENERAL LOCATION: East side of McCords South of 52nd st.

PARCEL SIZE: Approximately 160 acres.

EXISTING LAND USE
ON THE PROPERTY: Residential

ADJACENT AREA
LAND USES: Residential

ZONING ON
ADJOINING PARCELS: ARC

STAFF COMMENTS:

1. The applicant is requesting permission to construct a 72' x 210' accessory building (15,120 sq ft). The building will be about 22 feet tall as measured to the midpoint. This requires a minimum of a 60 foot setback from the side and rear property lines. The applicant shows the nearest setback of 300 to the side property line.
2. They have indicated that they want the building to keep equipment to be able to maintain the property.
3. With more than 6 acres they are allowed to have three accessory buildings.
4. They are currently building the house now. The house is not yet 50% complete and will need to be before we can issue the building permit for the barn.
5. The new barn is planned to have the same type of roof and siding. This type of building is not unusual for this area
6. We don't typically have buildings this size but it is also rare that we have properties this large. The last building this large (about 15,000 sq ft) was on a property of about 120 acres and that was in the R1 zone.
7. Any outdoor lighting will have to meet our standards, requiring it to be shielded and downcast or at a level that is exempted.
8. It should be noted that accessory buildings cannot be used for living space or to run a business.

Upon review of a Type I Special Use Permit for an accessory building, Section 17.03(1)(a) of the Zoning Ordinance requires the Planning Commission to consider several factors. I have listed those items for your consideration followed by my comments for each.

<i>Factors</i>	<i>Comments</i>
The intended use of the building.	Equipment storage
The proposed location, type and kind of construction and general architectural	The garage will be of similar materials to the house and others in the area.

character of the building.	
The size of the building in relation to the house, lot and zoning district.	The property is about 160 acres. The home has approximately 1,600 sq. ft. of finished living space.
The type and kind of principal and accessory buildings and structures located on properties which are adjoining and in the general area.	There are other detached buildings in the immediate area. This size is larger than most but the property is larger than most and the setbacks are much larger than most.
The topography and vegetation in the area.	Open with
Whether the proposed building will affect the light and air circulation of any adjoining properties.	No impact
Whether the proposed building will adversely affect the view of any adjoining property owner or occupant.	The location of the building would not have an adverse effect on adjoining property views.
Points of access to the proposed building and their relationship to adjoining properties and the view from the adjacent streets.	No new access to the street will be created.

STAFF RECOMMENDATION

I recommend that you approve the special use permit as requested with the following conditions.

1. The building is not used for living space or to run a business.
2. Any outdoor lighting meets our regulations.
3. House must be at least 50% complete (rough in approved) before a building permit can be issued for the barn.

Attachments: Application package



CASCADE CHARTER TOWNSHIP

2865 Thornhills SE Grand Rapids, Michigan 49546-7140

PLANNING & ZONING APPLICATION

APPLICANT: Name: ARON McCONNELL / MOCTON BUILDINGS
 Address: 4747 14 MILE RD NE
 City & Zip Code: ROCKFORD 49341
 Telephone: 616 302 6951
 Email Address: ARON.McCONNELL@MOCTONBUILDINGS.COM

OWNER: * (If different from Applicant)
 Name: MUROS INVESTMENTS LLC
 Address: 3016 McCabe
 City & Zip Code: Ada, mi 49301
 Telephone: 616 558 7538
 Email Address: doeringarthur@gmail.com

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

- | | | | |
|-------------------------------------|-----------------------------|-------------------------------------|---------------------------------|
| <input type="checkbox"/> | Administrative Appeal | <input checked="" type="checkbox"/> | Administrative Site Plan Review |
| <input type="checkbox"/> | Deferred Parking | <input type="checkbox"/> | P.U.D. - Rezoning * |
| <input type="checkbox"/> | P.U.D. - Site Condominium * | <input type="checkbox"/> | Rezoning |
| <input type="checkbox"/> | Site Plan Review * | <input type="checkbox"/> | Sign Variance |
| <input checked="" type="checkbox"/> | Special Use Permit | <input type="checkbox"/> | Subdivision Plat Review * |
| <input type="checkbox"/> | Zoning Variance | <input type="checkbox"/> | Other: _____ * |

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

BRIEFLY DESCRIBE YOUR REQUEST:**

CONSTRUCT HOUSE ~~AND BARN~~ ON OWNERS 160 ACRE
PARCEL

TO BE CONSTRUCTED USING SAME MATERIALS AS
HOME

(**Use Attachments if Necessary)

-SEE OTHER SIDE-

LEGAL DESCRIPTION OF PROPERTY**:

411936200027 THAT PART OF E 1/2 NW 1/4
LYING SLY OF SLY LINE OF C&O RR^{1/2}W 1100 FT WIDE / EX COM
1319.72 FT N 89 D 52 M 35 S E N LOAD E 1/4 W 1/4 LINE E
660 FT N 00 26 M 21 S W ALONG W LINE OF E 1/2 NW 1/4 FROM W 1/4 COR
TH N 00 26 M 21 S W ALONG SD W LINE 350 FT TH N 89 D W

(**Use Attachments if Necessary)

PERMANENT PARCEL (TAX) NUMBER: 41-19 36 200 027

ADDRESS OF PROPERTY: 5480 MCLORDS AVE SE

PRESENT USE OF THE PROPERTY: LEASED FOR CROPS

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.)

Arthur Doering
Owner - Print or Type Name
(*If different from Applicant)

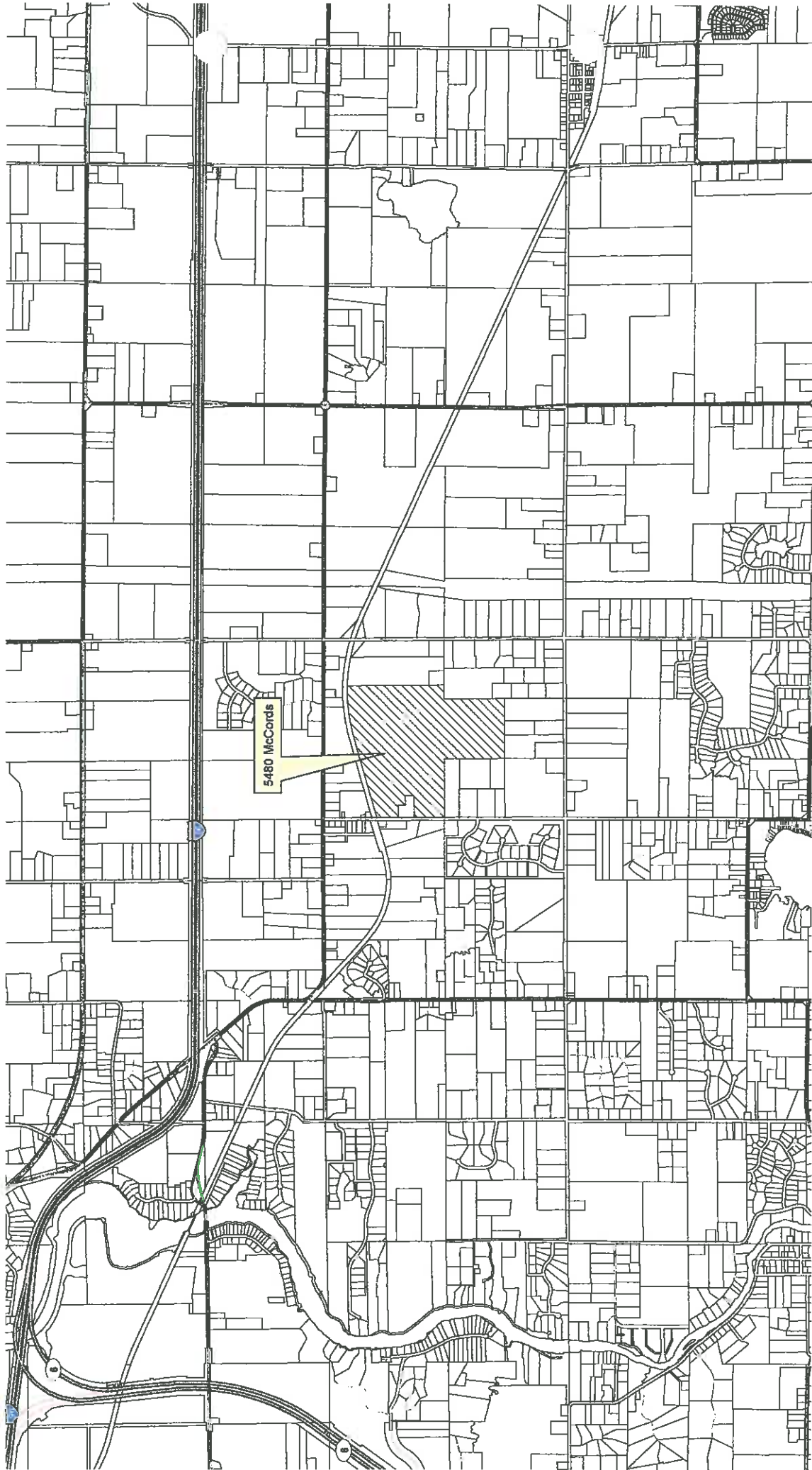
* 
Owner's Signature & Date
(*If different from Applicant)

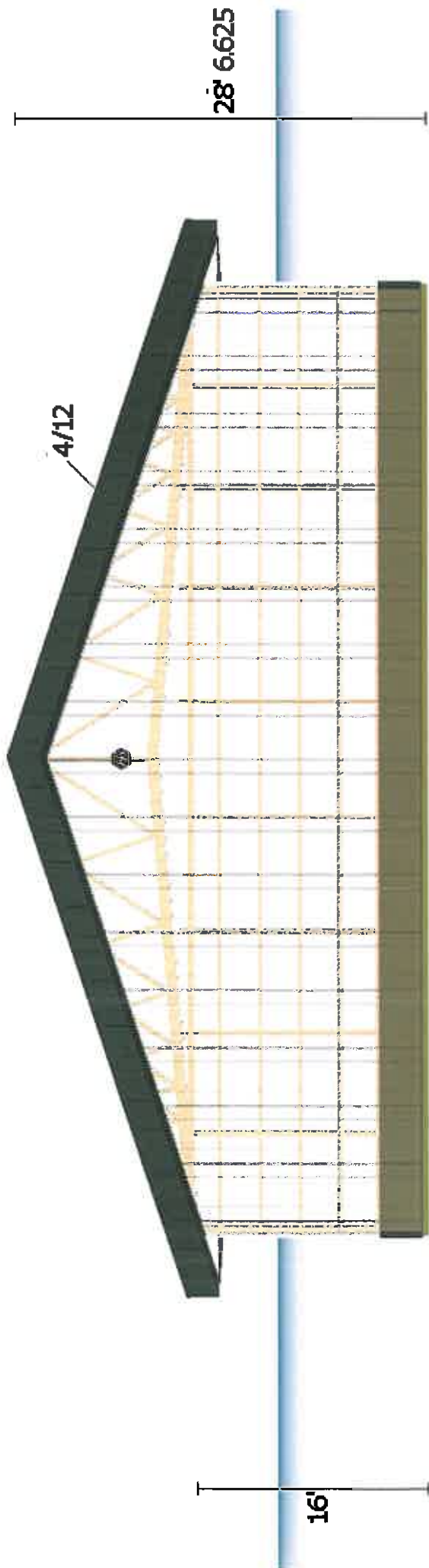
Arthur McNeill
Applicant - Print or Type Name

* 
Applicant's Signature & Date

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

Rev. 7/24/14

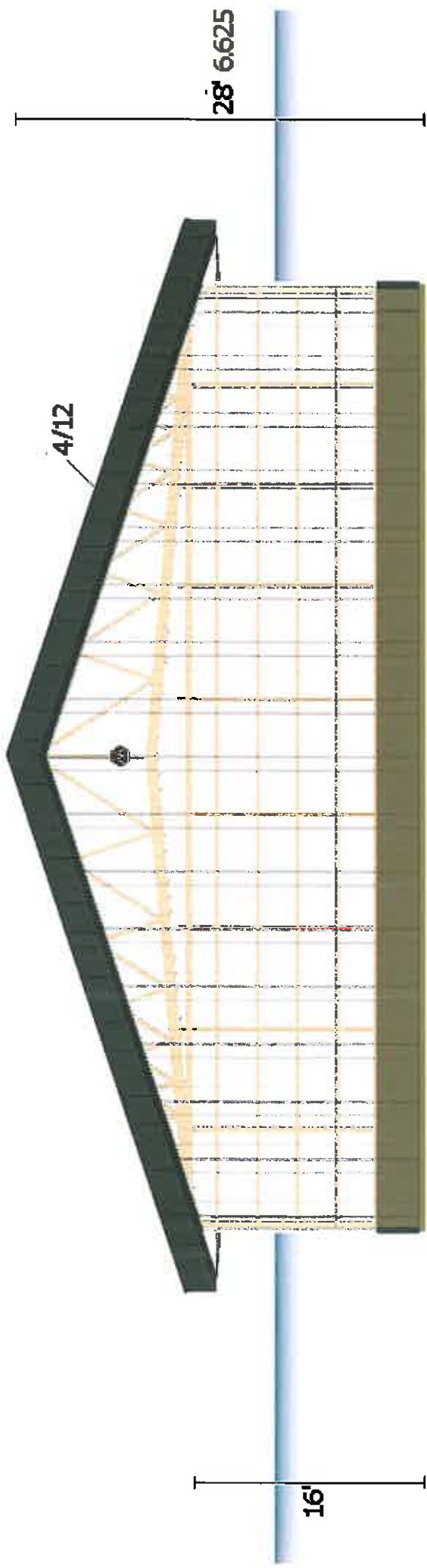




28' 6.625"

4/12

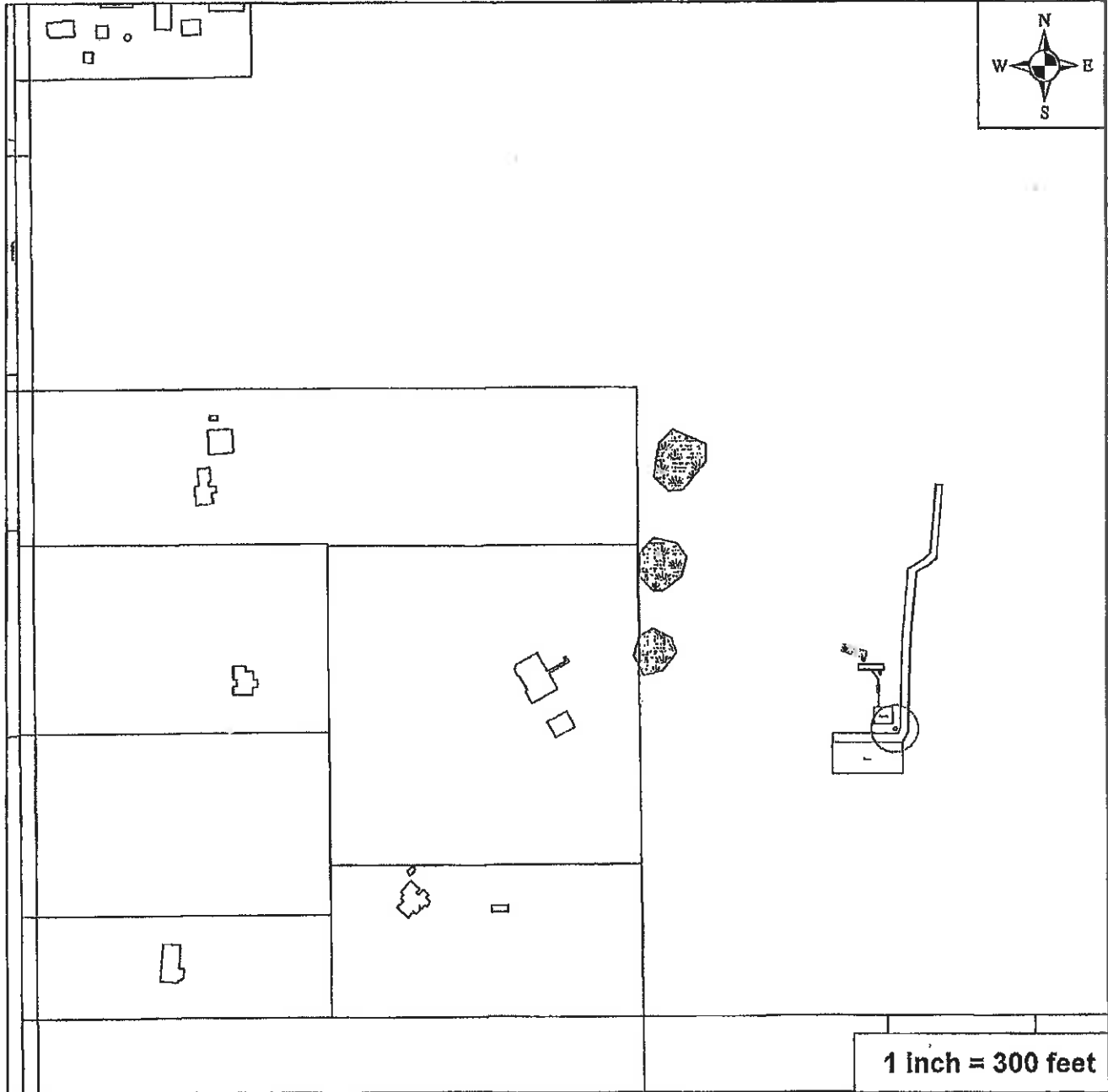
16'





Address: **5480 McCords Ave SE**

Date: 1/12/2018



Legend

- | | | |
|--------------|---------------------|-----------------|
| Septic Tank | Proposed Well Area | Parcels |
| Drain Field | Well Isolation Area | Contours - 2 ft |
| Reserve Area | Test Hole Location | Sewage Lift |

Kent County, MI makes no warranty, expressed or implied, regarding the accuracy, completeness or usefulness of information presented. Users of this information assume all liability for its fitness for a particular use.
 Source: Kent County GIS - Wellscreen 2013 Projection: NAD83 (HARN) - Michigan South (Feet) Prepared By: RDF3

STAFF REPORT: Case # 18-3438
REPORT DATE: February 19, 2018
PREPARED FOR: Cascade Charter Township Planning Commission
MEETING DATE: March 5, 2018
PREPARED BY: Steve Peterson, Planning Director

APPLICANT:
ADAC Automotive
5920 Tahoe Dr
Cascade MI 49546

STATUS

OF APPLICANT: owner.

REQUESTED ACTION: Site Plan Review for an addition and new building.

EXISTING ZONING OF
SUBJECT PARCEL: Transitional Industrial

GENERAL LOCATION: South side of Eagle Dr just east of Kraft Ave.

PARCEL SIZE: 10 Acres

EXISTING LAND USE
ON THE PARCEL: Industrial

ADJACENT AREA
LAND USES: All Industrial

ZONING ON ADJOINING
PARCELS: TI

STAFF COMMENTS:

1. The applicant is requesting site plan approval to construct a 21,000 sq ft addition. For the building at 5716 Eagle Dr. They are also asking for approval to construct a new 56,000 sq ft building at 5670 Eagle Dr. The site plan was reviewed under the criteria of the TI zoning district, Section 21.07 of the Site Plan Review Chapter of the Zoning Ordinance.
2. The project also involves the demolition of the existing building at 5670 Eagle Dr to accommodate the new building.
3. The project is being done so that they can consolidate their operations.
4. The project is complicated by the fact that the existing property lines are also the

local school district boundaries. In order to change the property lines to accommodate these projects, the school districts need to agree to move their boundaries. The Township has already approved the lot line shift but the KISD will also need to approve prior to any permits being issued.

5. The project will allow for the addition at 5716 Eagle Dr and then for the new building at 5670 Eagle Dr. Once the new building is constructed the applicant will then relocate the office and remove the building at 5670 Eagle Dr. The applicant should provide a performance bond in an amount equal to demolition the building prior to any building permits.
6. Once the property lines are moved the buildings will comply with all of the required height, area and setback regulations of the Transitional Industrial Zoning.
7. The KCRC has reviewed the plans and approved the curb cut locations
8. The site plan has been reviewed and approved by the Fire Department.
9. The site plan has been reviewed and approved by the Township Engineer.

STAFF RECOMMENDATION:

Staff is recommending Site Plan Approval under the following conditions:

- a. Performance bond for the demolition of the existing building at 5670 Eagle Dr. Bond will be released once the building is demolished.
- b. Approval from the schools to move the school boundaries prior to a permit being issued.
- c. Execute the storm water agreement.

Attachments: Application
 Site Plan
 Location Map



CASCADE CHARTER TOWNSHIP

2865 Thornhills SE Grand Rapids, Michigan
49546-7140

PLANNING & ZONING APPLICATION

APPLICANT: Name: ADAC AUTOMOTIVE
 Address: 5920 TAHOE DR. SE
 City & Zip Code: GRAND RAPIDS, MI 49546
 Telephone: (616) 957-0311
 Email Address: _____

OWNER: * (If different from Applicant)
 Name: _____
 Address: _____
 City & Zip Code: _____
 Telephone: _____
 Email Address: _____

NATURE OF THE REQUEST: (Please check the appropriate box or boxes)	
<input type="checkbox"/> Administrative Appeal	<input type="checkbox"/> Administrative Site Plan Review
<input type="checkbox"/> Deferred Parking	<input type="checkbox"/> P.U.D. – Rezoning *
<input type="checkbox"/> P.U.D. – Site Condominium *	<input type="checkbox"/> Rezoning
<input checked="" type="checkbox"/> Site Plan Review *	<input type="checkbox"/> Sign Variance
<input type="checkbox"/> Special Use Permit	<input type="checkbox"/> Subdivision Plat Review *
<input type="checkbox"/> Zoning Variance	<input type="checkbox"/> Other: _____ *

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

BRIEFLY DESCRIBE YOUR REQUEST:**

DEMO OF EXISTING OFFICE BUILDING & RECONSTRUCTION OF NEW
56,210 SFT OFFICE WITH NEW PARKING LAYOUT, STORMWATER MANAGEMENT,
SITE LIGHTING & LANDSCAPING, NEW 23,890 SFT BUILDING ADDITION TO
EXISTING BUILDING.

(**Use Attachments if Necessary)

-SEE OTHER SIDE-

LEGAL DESCRIPTION OF PROPERTY**:

SEE SITE PLANS

(**Use Attachments if Necessary)

PERMANENT PARCEL (TAX) NUMBER: 41-19-17-365-026, -024, -025, -027

ADDRESS OF PROPERTY: 5670 & 5716 EAGLE DRIVE

PRESENT USE OF THE PROPERTY: OFFICE & WAREHOUSE

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.)

JOHN F. SHARP

Owner - Print or Type Name
(*If different from Applicant)

Applicant - Print or Type Name

* [Signature] 2/2/2018

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

Applicant's Signature & Date

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



5920 Tahoe Drive, S.E.
Grand Rapids, MI 49546 USA
Phone: +1.616.957.0311
www.adacautomotive.com

February 23, 2018

Steve Peterson
Community Development Director
Cascade Charter Township-Planning & Zoning
2865 Thornhills, SE
Grand Rapids, MI 49546

Re: ADAC Automotive Site Plan Review Application – Project Narrative

Project Description

The project will consist of a building addition and renovations to an existing building located at 5716 Eagle Drive as well as construction of a new building, located at 5670 Eagle Drive. Properties are immediately adjacent to one another, each conforming with Cascade Township Zoning Ordinances. The renovation, addition and new construction will allow the Owner to consolidate several facilities into one corporate campus.

Construction Logistics

The Owner has hired the services of a construction manager for the project. To allow the Owner to continue operations at these locations, the following construction schedule has been established:

1. Commence construction/renovations to 5716 Eagle East Drive. Owner to remain operational during construction.
2. Prepare site for construction/foundations for new building at 5670 Eagle Drive. Existing building at 5670 Eagle Drive to remain operational
3. Commence construction at 5670 Eagle Drive. Existing building at 5670 Eagle Drive to remain operational
4. Complete Construction at 5716 Eagle Drive. Site and building occupied and fully operational.
5. Complete Construction at 5670 Eagle, Owner to relocate employees from existing 5670 Eagle drive building and other local facilities.
6. Demolish existing 5670 Eagle Drive building.
7. Complete remaining sitework/parking for 5670 Eagle Drive.

Sincerely,

James M. Teets
President and Chief Executive Officer





March 1, 2018
Project No. 170168

Mr. Steve Peterson
Cascade Charter Township
2865 Thornhills Avenue, SE
Grand Rapids, MI 49546-7192

Re: ADAC Automotive
Site Plan Review

Dear Steve:

We have reviewed the site plan for ADAC Automotive, located at 5716 and 5670 Eagle Drive, prepared by Moore and Bruggink, Inc. The current site plan and basis of this review is dated February 23, 2018. The proposed project will consist of a building addition and renovations to an existing building located at 5716 Eagle Drive and construction of a new building at 5670 Eagle Drive. The project will also include three new driveway locations, parking lot, stormwater management utilities, and other site related improvements. The site is in the Plaster Creek watershed, sub-drainage district Cascade West.

Stormwater and Drainage

Flood Control

The Cascade Charter Township Storm Water Ordinance (SWO), Section 1.04, states the ordinance shall apply to all development that requires any permit for work which will alter the stormwater drainage characteristics of the development site. The site is in Stormwater Management Zone B, which requires detention of the 25-year storm event and a direct connection (overland or underground) of the 100-year storm event, or detention of the 100-year storm event. The SWO also requires the first 0.5-inch of stormwater runoff be detained and released over a 24-hour period, or equivalent treatment.

Stormwater runoff from the site is collected by a series of catch basins and discharged to three separate underground detention basins. The underground detention basins discharge to the existing storm sewer in Eagle Drive. All stormwater runoff from the impervious areas of the site will be collected by the detention basins. Roof drains shall drain to or be directly connected to the onsite storm sewer system. The detention basins were sized for the 25-year storm event in accordance with the SWO.

Water Quality Control

The SWO requires the first 0.5-inch of stormwater runoff be detained and released over a 24-hour period, or equivalent treatment. The proposed stormwater management plan is to install pretreatment devices at all catch basins leading into the underground detention basins. The pretreatment devices are designed to capture and settle out sediment prior to it reaching the detention basins. This is an acceptable alternative to extended detention of the first 0.5-inch and meets the requirements of the SWO.

Stormwater Runoff

The applicant provided stormwater calculations to size the onsite underground detention basins. All stormwater runoff from the impervious areas of the site will discharge to the detention basin. Therefore, the site will not see an increase in rate of stormwater leaving the site.



Drainage Plan

The applicant has submitted drawings, calculations, and additional documentation as required in the SWO Section 2.03, Drainage Plan. Please refer to the included checklist for items and comments on each item. Please note a maintenance agreement is required before construction begins. The agreement should be submitted to the Township for review. The maintenance agreement and plan should include at a minimum, monitoring and cleaning of the underground detention basins and catch basin sumps.

Utilities

The proposed project includes a new 2-inch domestic water service, 8-inch fire protection service, and 6-inch sanitary sewer service for the new building. No new public water or sanitary sewer main extensions are proposed for the site. City of Grand Rapids permits will be required for the water and sanitary sewer connections prior to construction taking place.

Driveway

Three new driveway locations will replace two existing driveways. The applicant has coordinated the driveway locations with the Kent County Road Commission (KCRC). At the request of the KCRC, two of the driveways were located directly across from two existing driveways along the north side of Eagle Drive. The easterly most driveway is located at least 100 feet from an existing driveway at the east property line, as measured from centerline to centerline. A permit from the KCRC will be required prior to construction.

Soil Erosion and Sedimentation Control

Soil Erosion and Sedimentation Control (SESC) measures are provided on the plan drawings. The applicant has included silt fence along the limits of clearing and grading, and silt sacks in catch basins. SESC falls under the review and approval of the KCRC, and a permit is required before construction can begin. The SESC measures indicated on the drawings appear appropriate, given the expected work.

Summary

The proposed stormwater design meets the Township SWO requirements for new developments. The applicant will need to apply for and obtain several permits prior to beginning construction (SESC and driveway from the KCRC, water and sewer from the City of Grand Rapids). We recommend approval of the site plan from an engineering standpoint.

If you have any questions or require additional information, please contact me at 616.464.3786 or nrtorrey@ftch.com.

Sincerely,

FISHBECK, THOMPSON, CARR & HUBER, INC.

A handwritten signature in black ink, appearing to read "Nathan R. Torrey", is positioned above the printed name.

Nathan R. Torrey, PE

pmb

Attachment

By email

cc: Michael L. Berrevoets, PE – FTCH



Cascade Charter Township

Storm Water Ordinance, Ordinance 7 of 2002, as amended by Ordinance No. 2 of 2008, 5/14/2008

Reviewing Engineer Comments are Italicized

OK – Received and Acceptable

NA – Not Applicable

NR – Not Received, Needs Follow-up, See Comments

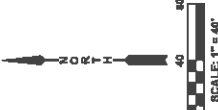
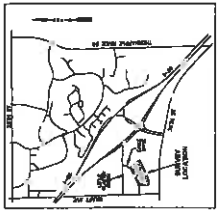
ADAC Automotive

Drainage Plan Checklist

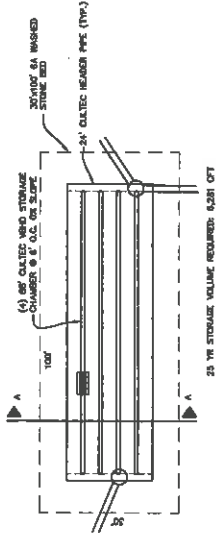
- OK (1) Location of the development site and water bodies that will receive storm water runoff
Stormwater runoff from the site discharges to three underground detention systems that drain to the existing storm sewer in Eagle Drive.
- OK (2) Existing and proposed topography of the development site, including the alignment and boundary of the natural drainage courses, with contours having a maximum interval of one foot (using USGS datum). The information shall be superimposed on the pertinent Kent County soil map
Existing and proposed contours have been provided. Soil map information is not required.
- OK (3) Development tributary area to each point of discharge from the development.
The applicant provided tributary areas for that portion draining to the detention basins.
- OK (4) Calculations for the final peak discharge rates
The applicant provided calculations for the onsite storm sewer system.
- OK (5) Calculations for any facility or structure size and configuration
The applicant provided calculations for the onsite storm sewer and detention systems.
- OK (6) Drawing showing all proposed storm water runoff facilities with existing and final grades
The applicant provided plans showing all proposed storm water runoff facilities.
- OK (7) The sizes and locations of upstream and downstream culverts serving the major drainage routes flowing into and out of the development site. Any significant off-site and on-site drainage outlet restrictions other than culverts should be noted on the drainage map
Significant offsite flows were not identified by the applicant.
- OK (8) An implementation plan for construction and inspection of all storm water runoff facilities necessary to the overall drainage plan, including a schedule of the estimated dates of completing construction of the storm water runoff facilities shown on the plan and an identification of the proposed inspection procedures to ensure that the storm water runoff facilities are constructed in accordance with the approved drainage plan
A construction schedule was included on the plans.
- OK (9) Plan to ensure the effective control of construction site storm water runoff and sediment track-out onto roadways
The SESC measures shown on the plan appear appropriate given the expected work. SESC falls under the review and approval of the KCRC and a permit is needed before construction can begin.



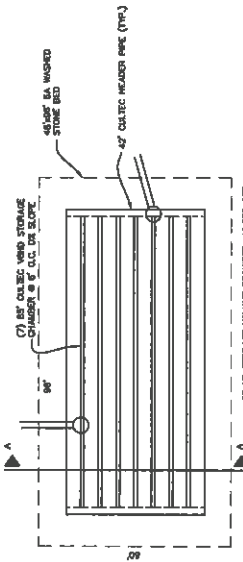
- OK (10) Drawings, profiles, and specifications for the construction of the storm water runoff facilities reasonably necessary to ensure that storm water runoff will be drained, stored, or otherwise controlled in accordance with this ordinance
The applicant provided a plan and design details for construction of the onsite drainage system.
- NR (11) Maintenance agreement, in form and substance acceptable to the Township, for ensuring maintenance of any privately owned storm water runoff facilities. The maintenance agreement shall include the developer's written commitment to provide routine, emergency, and long-term maintenance of the facilities and, in the event that the facilities are not maintained in accordance with the approved drainage plan, the agreement shall authorize the Township to maintain any on-site storm water runoff facility as reasonably necessary, at the developer's expense
Maintenance agreement was not provided and is required.
- OK (12) Name of the engineering firm and the registered professional engineer that designed the drainage plan and that will inspect final construction of the storm water runoff facilities
- NA (13) All design information must be compatible for conversion to Grand Valley Regional Geographic Information System (REGIS)
This is a privately owned system and will not be uploaded to REGIS.
- OK (14) Other information necessary for the Township to verify that the drainage plan complies with the Township's design and performance standards for drains and storm water management systems



SURFACE ELEV. WAKES
CROSS SECTION A-A

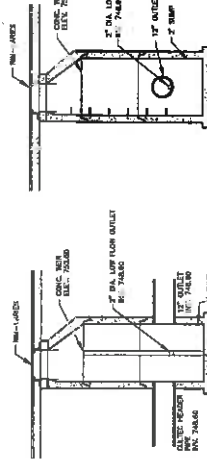


SURFACE ELEV. WAKES
CROSS SECTION A-A



OUTLET CONTROL DETAIL
NO SCALE

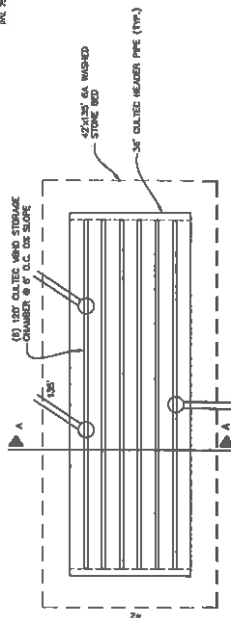
UNDERGROUND SYSTEM #2



SURFACE ELEV. WAKES
CROSS SECTION A-A



SURFACE ELEV. WAKES
CROSS SECTION A-A



OUTLET CONTROL DETAIL
NO SCALE

UNDERGROUND SYSTEM #3

OUTLET CONTROL DETAIL
NO SCALE

UNDERGROUND SYSTEM #1

PREPARED FOR:
MOORE & BRUGGINK, INC.
10000 W. 100th Street
Overland Park, KS 66204

PROJECT NO.	10000 W. 100th Street
DATE	10/1/11
DESIGNED BY	J.L.
CHECKED BY	J.L.
IN CHARGE	J.L.
PROJECT NO.	10000 W. 100th Street
DATE	10/1/11
DESIGNED BY	J.L.
CHECKED BY	J.L.
IN CHARGE	J.L.
SHEET NUMBER	5 OF 5

DETAILS FOR
ADAC AUTOMOTIVE
CASCADE TOWNSHIP, COUNTY, MICHIGAN
MOORE & BRUGGINK, INC.
Consulting Engineers
Grand Rapids, Michigan 49505-6208
Phone: (616) 355-9999 Web: www.mabos.com



Know what's below.
Call before you dig.

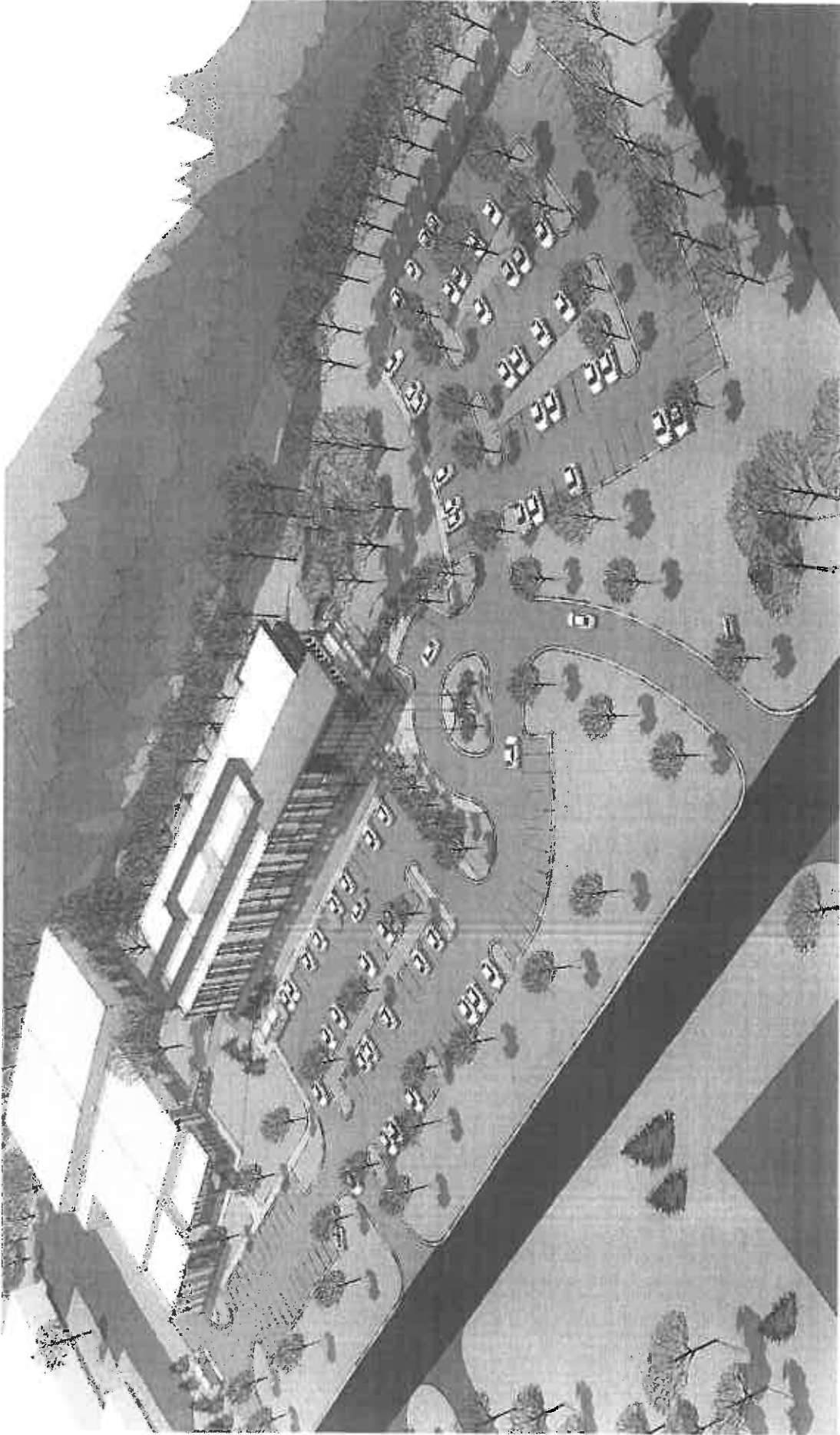
NOTE: In addition to the requirements set forth in the specifications, please select the "Dig" lines working date prior to the start of construction for each location. (1-800-482-1171)



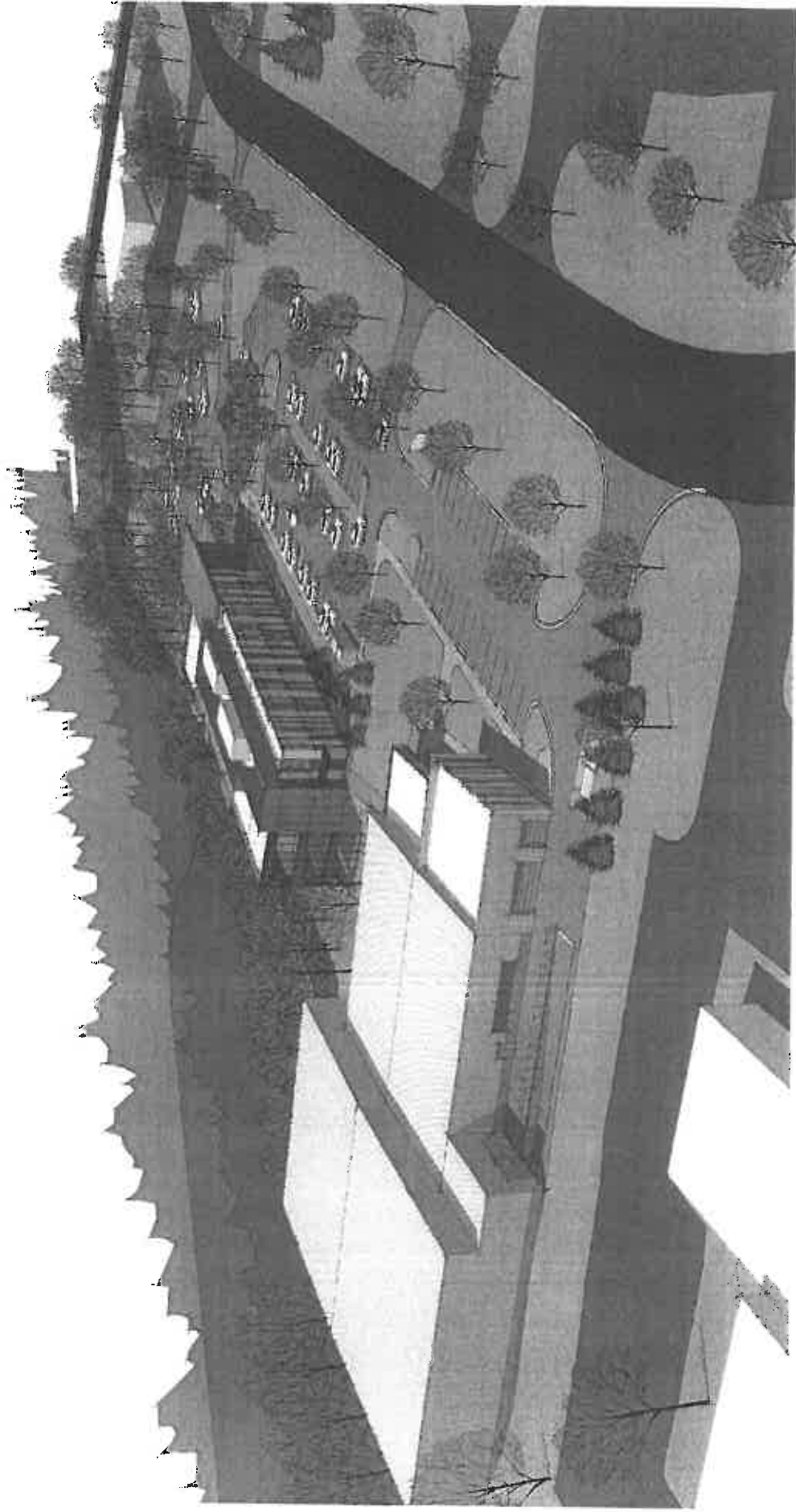
**CORPORATE CAMPUS
GRAND RAPIDS, MI**

Site Plan Approval
February 5th, 2018

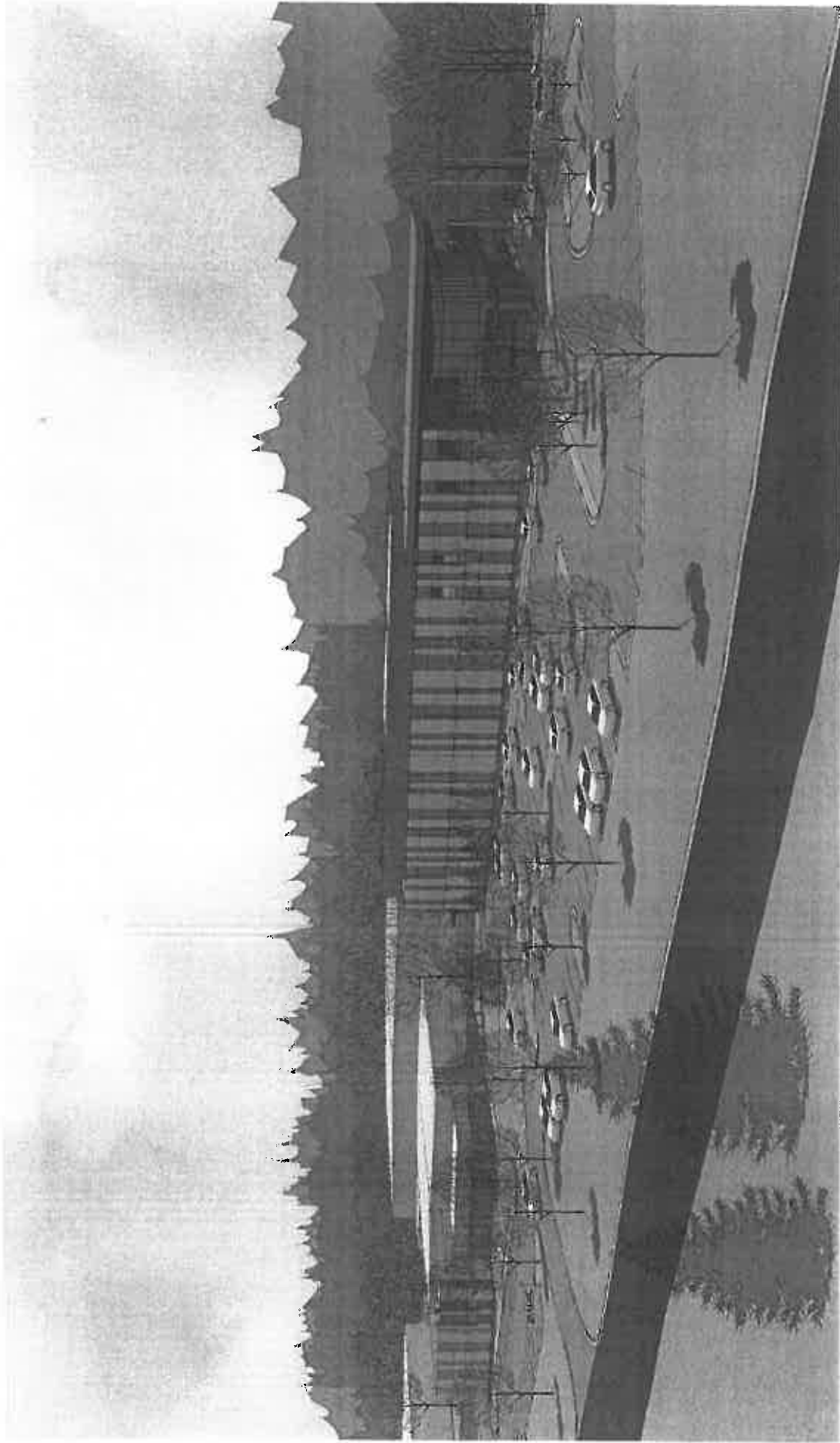
CORPORATE CAMPUS AERIAL



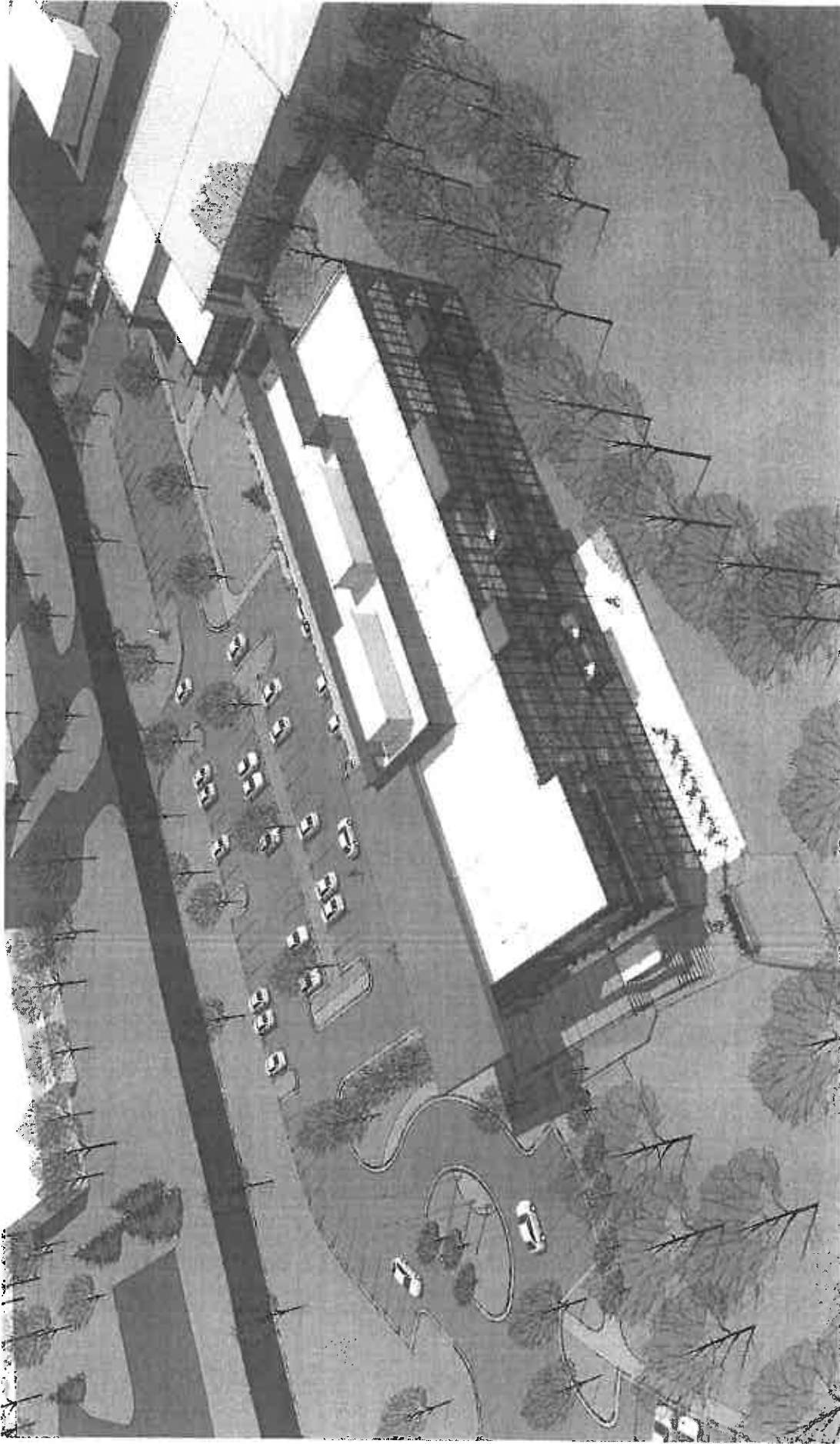
CORPORATE CAMPUS AERIAL



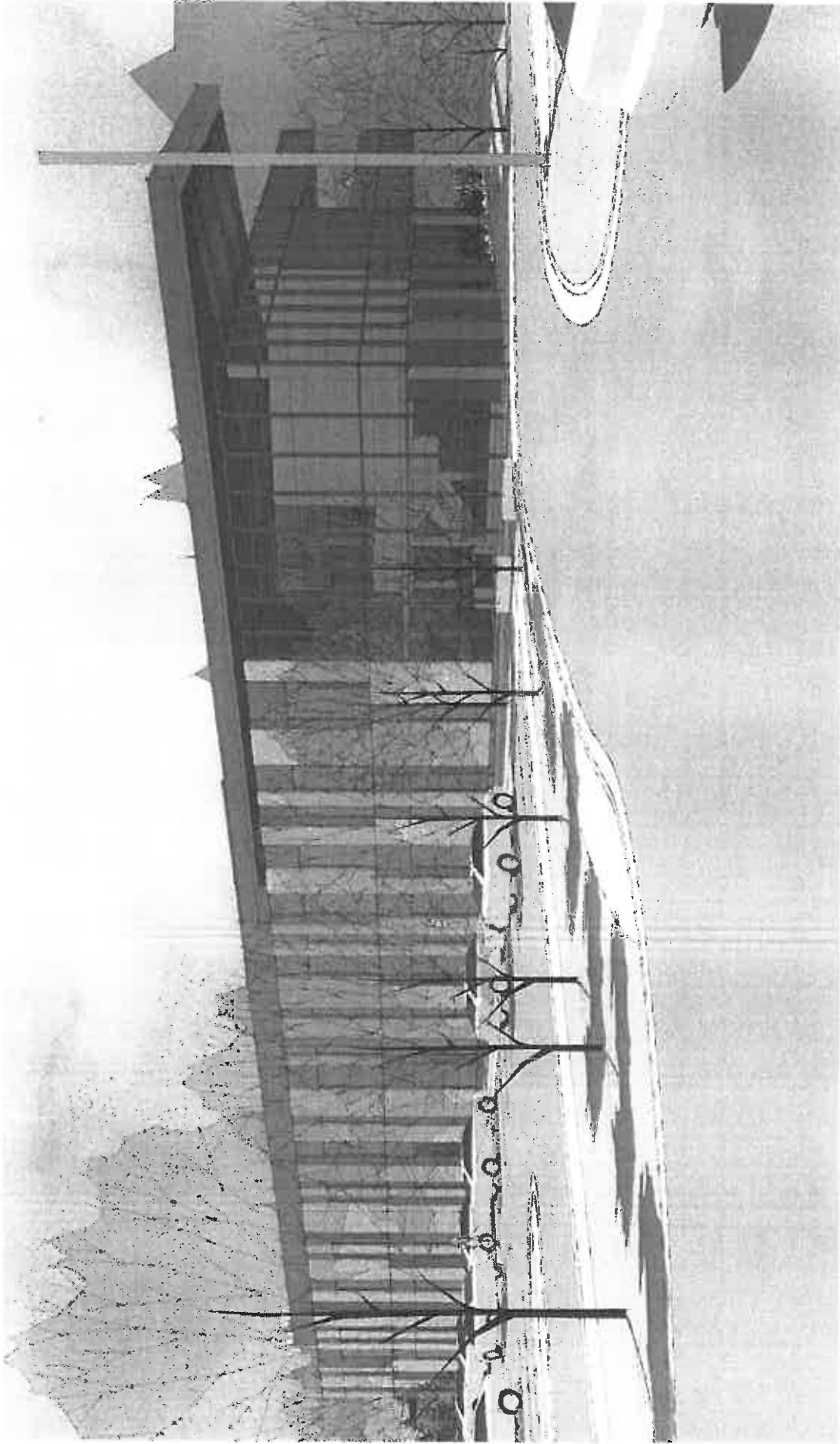
CORPORATE CAMPUS AERIAL



CORPORATE CAMPUS AERIAL

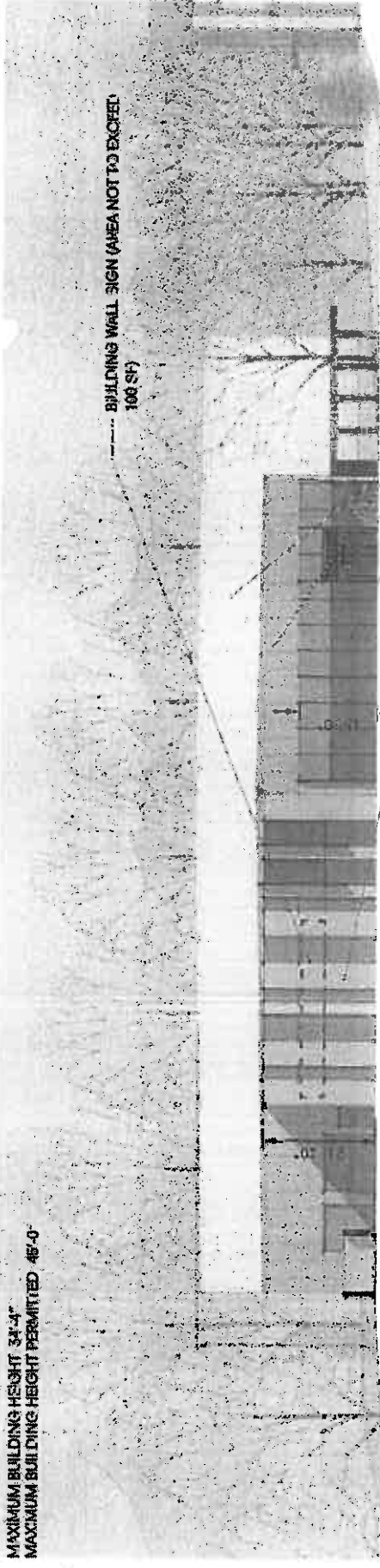


5712 EAGLE ENTRY



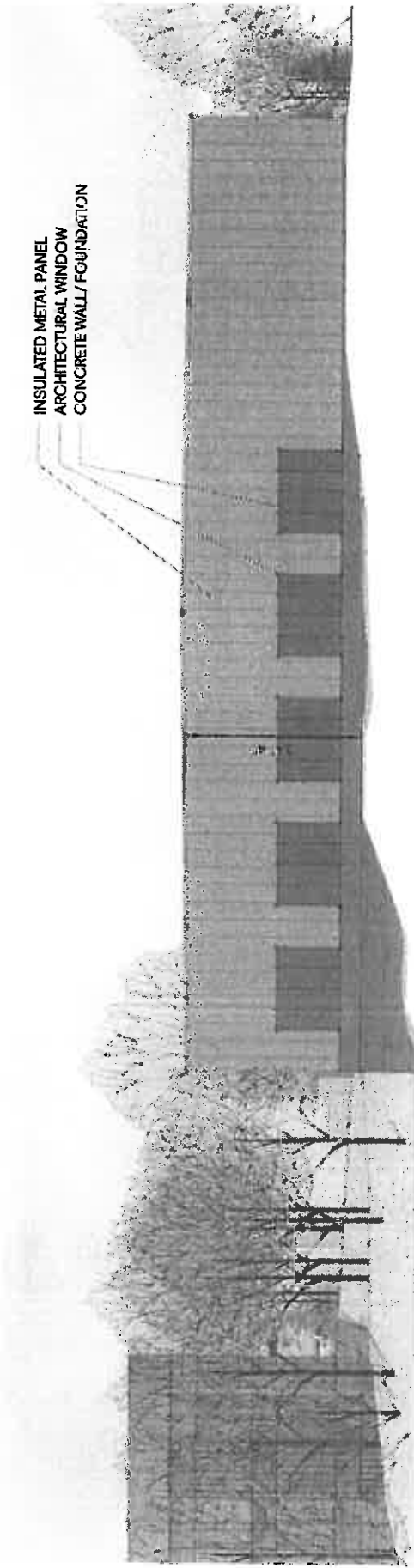
5716 EAGLE BUILDING ELEVATIONS

MAXIMUM BUILDING HEIGHT 31'-4"
MAXIMUM BUILDING HEIGHT PERMITTED 46'-0"



NORTH (FRONT)

INSULATED METAL PANEL BEYOND
METAL PANEL ENTRY ENCLOSURE
STOREFRONT GLAZING
MASONRY FACADE

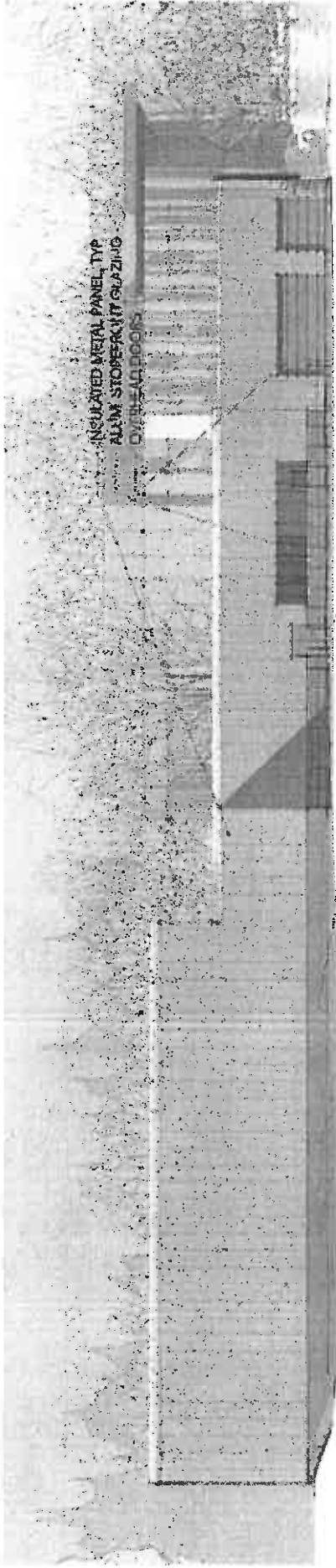


SOUTH (REAR)

INSULATED METAL PANEL
ARCHITECTURAL WINDOW
CONCRETE WALL/ FOUNDATION

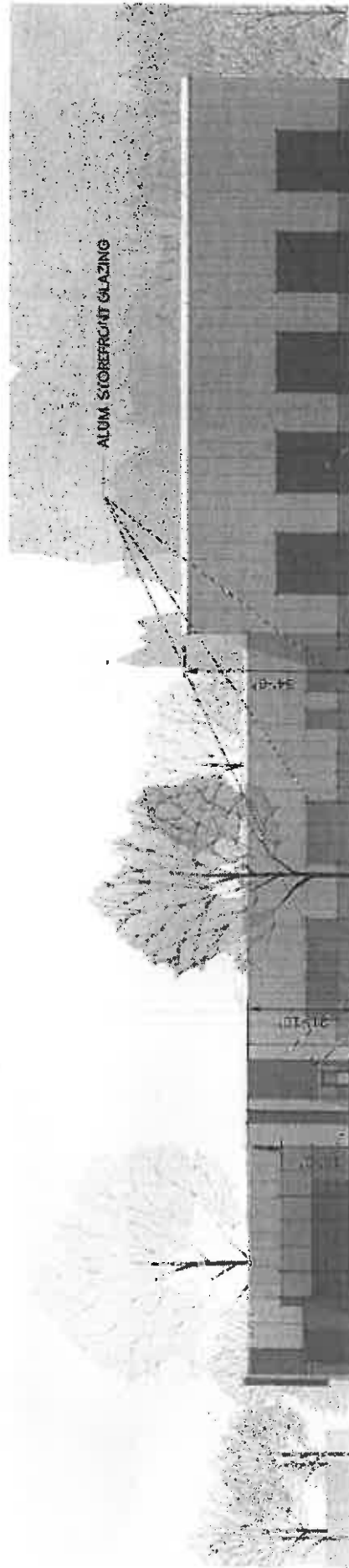


5716 EAGLE BUILDING ELEVATIONS



EAST (SIDE)

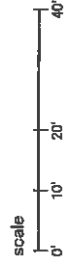
GALV. STEEL GUARDRAIL
CONCRETE WALL/ FOUNDATION



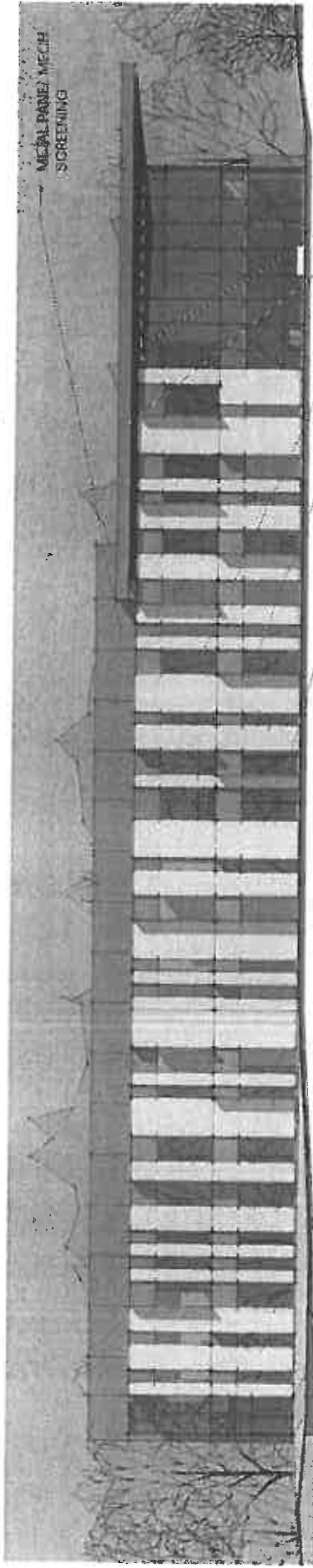
WEST (SIDE)

MASONRY FACADE
METAL PANEL CANOPY
CURTAIN WALL GLAZING
CONCRETE WALL/ FOUNDATION

INSULATED METAL PANEL
ALUM. STOREFRONT GLAZING
CONCRETE WALL/ FOUNDATION

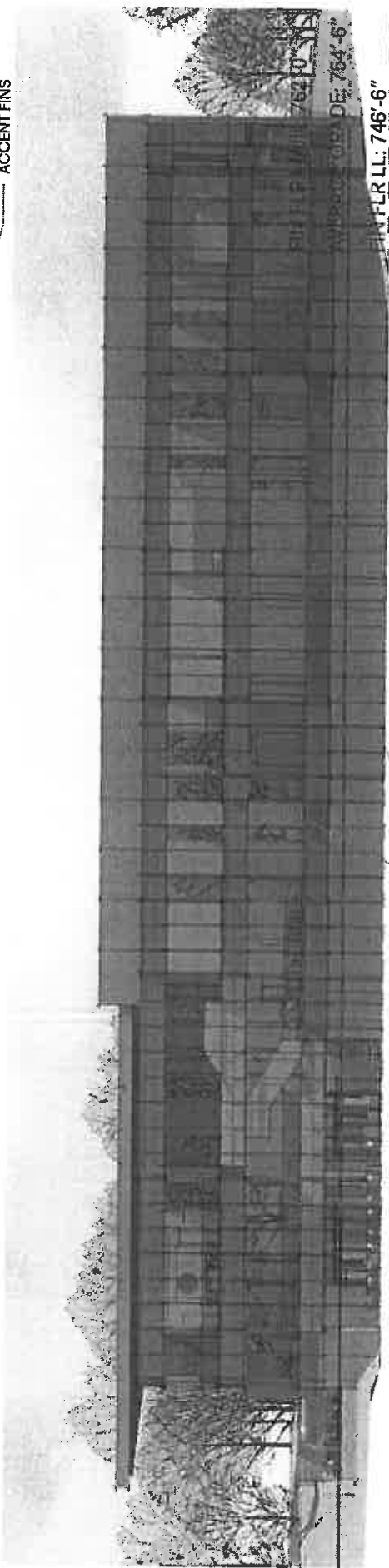


5712 EAGLE BUILDING ELEVATIONS



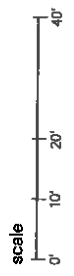
NORTH (FRONT)

- BUILDING WALL SIGN (AREA NOT TO EXCEED 100 SF)
- METAL PANEL CANOPY
- ARCHITECTURAL GLAZING
- MASONRY PIERS
- ACCENT FINIS

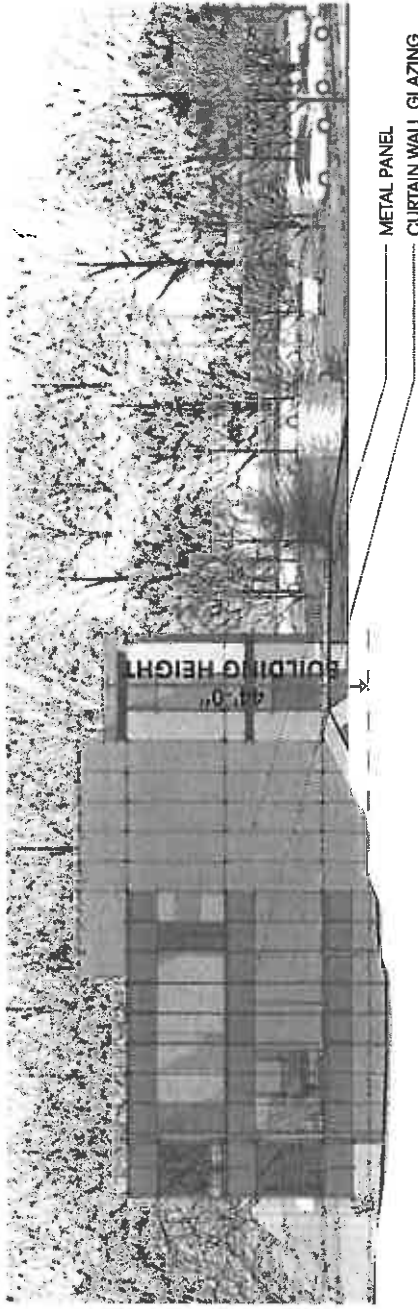


SOUTH (REAR)

- METAL PANEL MECH ENCLOSURE
- CURTAIN WALL GLAZING, TYP



5712 EAGLE BUILDING ELEVATIONS

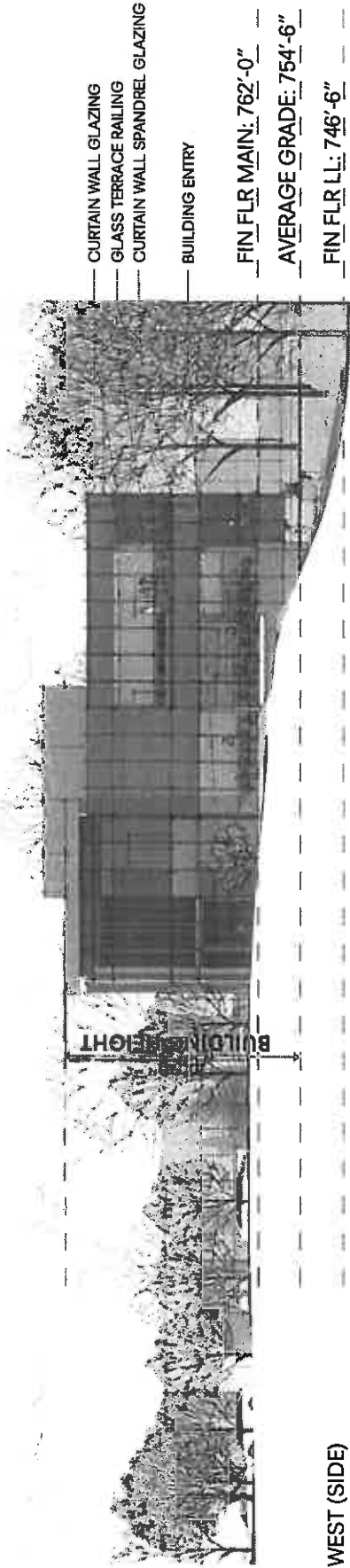


FIN FLR: 762'-0"

AVERAGE GRADE: 754'-6"

METAL PANEL
CURTAIN WALL GLAZING

EAST (SIDE)



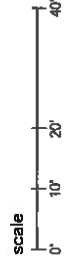
CURTAIN WALL GLAZING
GLASS TERRACE RAILING
CURTAIN WALL SPANDREL GLAZING

BUILDING ENTRY

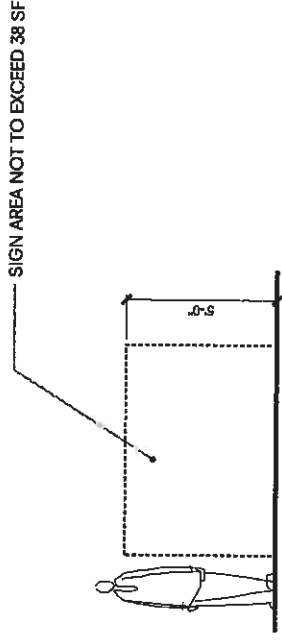
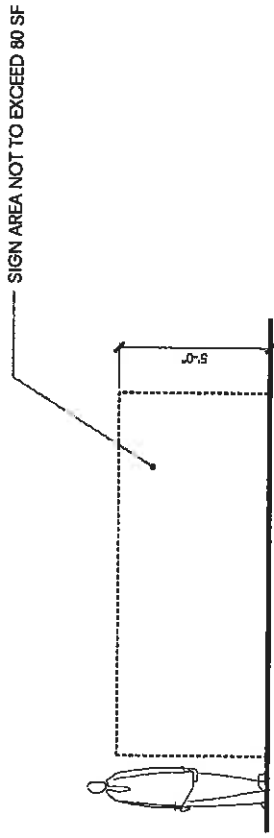
FIN FLR MAIN: 762'-0"

AVERAGE GRADE: 754'-6"

FIN FLR LL: 746'-6"



SIGNAGE



5712 EAGLE

MONUMENT SIGNAGE

Parcel width at setback - 465'
(Maximum 80 sf permitted)

5716 EAGLE

MONUMENT SIGNAGE

Parcel width at setback - 192'
(Maximum 38 sf permitted)