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Permit Application Review

Permit No. 2022-060
Received complete: May 26, 2022

Applicant:	Ben Krsnak; Hempel Real Estate
Consultant:	Brian Frank; Sambatek, Inc
Project:	10250 Crosstown Circle Redevelopment
Location:	10250 Crosstown Circle and 6534 Flying Cloud Drive: Eden Prairie
Applicable Rule(s):	4 and 5
Reviewer(s):	Dallen Webster and Louise Heffernan; Barr Engineering Co.

General Background & Comments

The applicant proposes the redevelopment of the commercial site, two adjacent parcels under common ownership, located at 10250 Crosstown Circle and 6534 Flying Cloud Drive in Eden Prairie. Currently, the 5.03-acre site is occupied by an existing building with associated site elements and surface parking.

The project proposes the following:

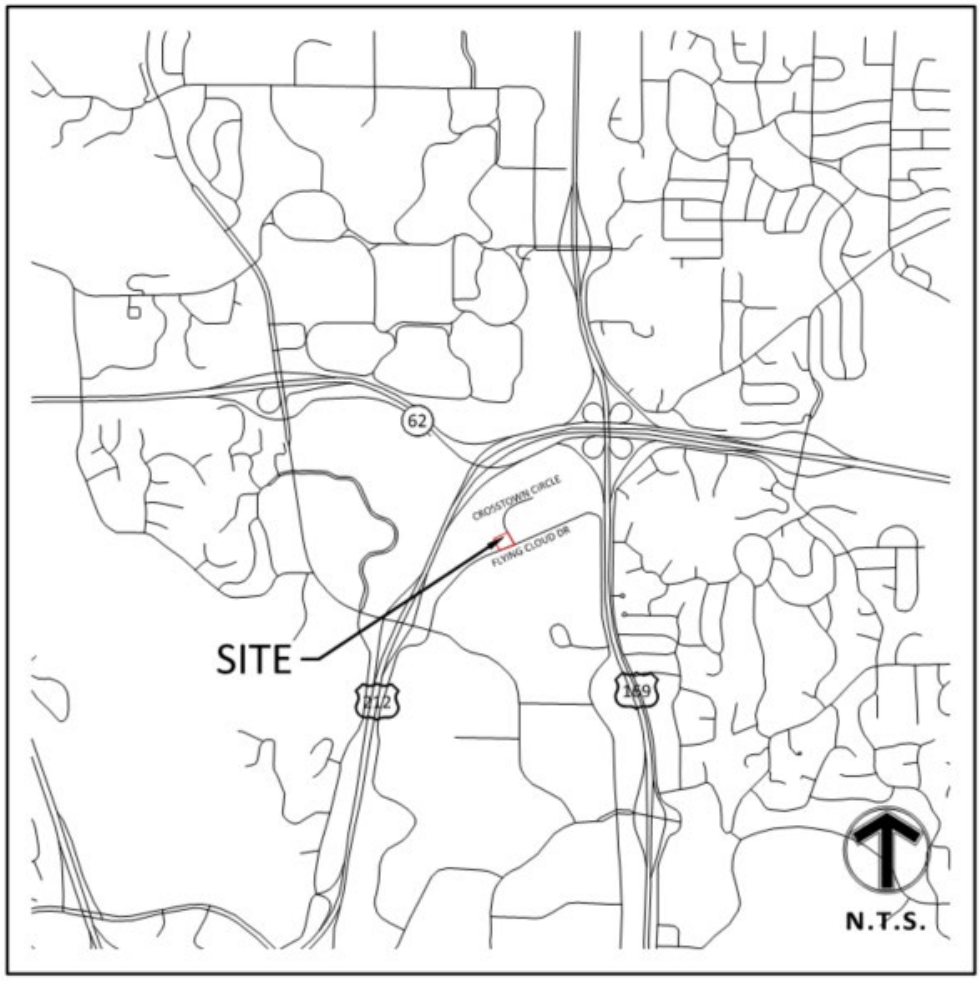
- demolition and removal of the existing building, concrete and bituminous pavement, surface parking and associated base materials.
- site clearing and grading.
- construction of 63,905-square foot industrial building with a loading dock and surface parking lot.
- construction of an entrance drive.
- site improvements including concrete sidewalks, landscaping, and utilities.
- construction of an underground stormwater management facility (UGSWMF).

The project site information is:

- Total Site Area: 5.03 acres (219,107 square feet)
- Disturbed Area: 4.96 acres (216,058 square feet)
- Existing Site Impervious Area: 2.54 acres (110,624 square feet)
- Proposed Site Impervious Area: 3.63 acres (157,962 square feet)
- Increase in Impervious Area: 1.09 acres (42.8% increase in impervious area)
- 100% of the existing impervious surface is to be disturbed

The district's requirements for both stormwater management and erosion and sediment control apply to the project because more than 50 cubic yards of material will be disturbed and 5,000 square feet or more of surface area is altered, Rules 4.2.1a and b and 5.2.1a and b.

Figure 1. Site location



Exhibits Reviewed:

1. Permit Application dated April 28, 2022. Email correspondence dated May 19, 2022, outlining 10 items required to complete the application.
2. Plans dated April 28, 2022, with the most recent revision dated May 26, 2022, prepared by Sambatek, Inc.
3. Stormwater Management Report dated September 18, 2020, revised March 15, 2021, April 13, 2021, April 28, 2022 and June 1, 2022, prepared by Sambatek, Inc.
4. Electronic P8 model files received May 26, 2022, prepared by Sambatek, Inc.
5. Electronic HydroCAD model files received May 26, 2022, prepared by Sambatek, Inc.
6. Geotechnical Engineering Report dated March 31, 2020, prepared by GZA GeoEnvironmental, Inc.
7. Additional Soil Boring Logs (SB-8 & SB-9) dated May 18, 2021, prepared by Haugo GeoTechnical Services, LLC.

8. City of Eden Prairie PUD Approval Resolution (No. 2021-058) dated July 13, 2021.
9. City of Eden Prairie Preliminary Plat Approval Resolution (No. 2021-059) dated July 13, 2021.
10. Comment Response Memo dated May 26, 2022, prepared by Sambatek, Inc.

The application with the submittal items above is complete.

4.0 Stormwater Management

The district's requirements for stormwater management apply to the project because more than 50 cubic yards of material will be disturbed and 5,000 square feet or more of surface area is altered, Rules 4.2.1a and b.

The NMCWD's Rule for Redevelopment, Rule 4.2.3, states, if a proposed activity will disturb more than 50% of the existing impervious surface on the site or will increase the site imperviousness by more than 50%, stormwater management will apply to the entire project site. Otherwise, the stormwater requirements will apply only to the disturbed, replaced and net additional impervious surface on the project site. Since the project will disturb the entire site (100% of the existing impervious surface to be disturbed), the district's stormwater management criteria are required for the entire site, including the proposed 3.63 acres (157,962 square feet) of impervious surface.

Stormwater management for compliance with Rules 4.3.1a, b and c will be provided by an UGSWMF.

Rule 4.3.1b requires the 2-, 10-, and 100-year post development peak runoff rates be equal to or less than the existing discharge rates at all points where stormwater leaves the site. The applicant used a HydroCAD hydrologic model to simulate runoff rates at the two collection points where stormwater discharge leaves the site. The existing and proposed 2-, 10- and 100-year frequency discharges from the site are:

Existing Conditions			
Modeled Discharge Location	2-year (c.f.s.)	10- year (c.f.s.)	100-year (c.f.s.)
To Adjacent Property (West)	<1.0	<1.0	<1.0
To Crosstown Circle Storm Sewer (East)	1.2	6.4	20.2
Total	1.6	7.0	20.8

Proposed Conditions			
Modeled Discharge Location	2-year (c.f.s.)	10- year (c.f.s.)	100-year (c.f.s.)
To Adjacent Property (West)	<1.0	<1.0	<1.0
To Crosstown Circle Storm Sewer (East)	1.1	4.9	18.4
Total	1.2	5.2	18.9

Rule 4.3.1b is met.

The Haugo GeoTechnical Services soil boring logs identify the underlying soil within the area of the UGSWMF as silty-sand (SM) underlain by clayey sand (SC) and poorly graded sand with silt (SP-SM). The site plans must indicate that the silty sand (SM) and clayey sand (SC) will be excavated and replaced by poorly graded select granular borrow beneath the entire footprint of the UGSWMF. A design infiltration rate of 0.45 inches per hour has been used, conforming with infiltration rates identified in the Minnesota Storm Water Manual.

A retention volume of 14,480 cubic feet is required from the 157,962 square feet of proposed site impervious area. A retention volume of 14,579 cubic feet is proposed to be provided (14,480 cubic feet required) with an infiltration area of 12,065 square feet (8,044 square feet required) provided below the UGSWMF outlet elevation. With an infiltration area of 12,065 square feet, the volume retention is drawn down within 33-hours, complying with Rule 4.3.1a (ii).

The district's water quality criterion requires a 60% annual removal efficiency for total phosphorus (TP) and 90% annual removal efficiency for total suspended solids (TSS). The results from the MIDS model provided show that the UGSWMF will provide an annual removal efficiency of 90% for TSS (1,159 lbs.) and an annual removal efficiency of 87% for TP (6.16 lbs.). The NMCWD engineer agrees with the modeling results. Rule 4.3.1c is met.

Pollutant of Interest	Site Loading (lbs./year)	Required Load Removal (lbs./year)	Provided Load Reduction (lbs./year)
Total Suspended Solids (TSS)	1,288	1,159 (90%)	1,159 (90%)
Total Phosphorus (TP)	7.09	4.25 (60%)	6.16 (87%)

Rule 4.5.4d (i) requires at least three feet of separation between the bottom of an infiltration facility and groundwater. The Haugo GeoTechnical Services geotechnical evaluation identified groundwater within soil boring SB-8 near the proposed UGSWMF. Groundwater was encountered at an elevation of 886.6 +/- M.S.L. The following table provides a comparison of the bottom elevation of the UGSWMF in relation to groundwater.

Proposed Stormwater Management Facility	Bottom Elevation of UGSWMF M.S.L.	Groundwater Elevation (SB-8) M.S.L.	Separation Provided (feet)
UGSWMF	893.9	886.6*	7.3

*Highest observed groundwater elevation near proposed UGSWMF

The required three (3) feet of separation is provided between the bottom of an infiltration area and groundwater.

Rule 4.3.3 states that all new and reconstructed buildings must be constructed such that the low floor is at least two feet above the 100-year high-water elevation or one foot above the emergency overflow of a constructed facility. Additionally, Rule 4.3.3 states that all new and reconstructed buildings must be constructed such that no opening where surface flow can enter the structure is less than two feet above the 100-year high-water elevation of an adjacent

facility. The low floor and low opening elevations of the proposed building in relation to the proposed UGSWMF 100-year high-water elevation is summarized in the table below.

Building	100-year Frequency Flood Elevation of UGSWMF (M.S.L.)	Low Floor and Low Opening Elevation of Proposed Building (M.S.L.)	Low Opening Separation Provided (feet)
Proposed Industrial Building	900.3	906.5	6.2

The project is in conformance with Rule 4.3.3 criteria.

In accordance with Rule 4.3.1a (i), where infiltration or filtration facilities, practices or systems are proposed, pre-treatment of runoff must be provided. Sump manholes will provide the required pretreatment of runoff from the paved surfaces, complying with Rule 4.3.1a (i). An isolator row will provide the required pretreatment of runoff from the building roof, complying with Rule 4.3.1a (i).

In accordance with Rule 4.3.4, a post-project chloride management plan must be provided that will, 1) designate an individual authorized to implement the chloride-use plan and 2) designate a MPCA certified salt applicator engaged in the implementation of the chloride-use plan for the site.

Subsection 4.3.5 requires the submission of a maintenance plan. All stormwater management structures and facilities must be designed for maintenance access and properly maintained in perpetuity to assure that they continue to function as designed. The applicant must provide a receipt showing recordation of a maintenance declaration for the operation and maintenance of the stormwater management facilities.

5.0 Erosion and Sediment Control

The district's requirements for erosion and sediment control apply to the project because more than 50 cubic yards of material will be disturbed and 5,000 square feet or more of surface area is altered, Rules 5.2.1a and b.

The erosion control plan prepared by Sambatek, Inc includes installation of silt fence, a stabilized rock construction entrance and storm sewer inlet protection.

The contractor for the project will need to designate a contact who will remain liable to the district for performance under the District's Erosion and Sediment Control Rule 5.0, in accordance with subsection 5.4.1e. NMCWD must be notified if the responsible individual changes during the permit term.

11.0 Fees

Fees for the project are:

Rules 4.0 and 5.0 $1,500

12.0 Financial Assurances

Financial Assurances for the project are:

Rule 4: Stormwater Management Facility: 8,044 S.F. x $12/S.F.= $96,528

Rule 5: Perimeter Control: 1,850 L.F. x $2.50/L.F. = $4,625

Inlet Protection: 26 x $100 = $2,600

Site Restoration: 5.0 acres x $2,500/acre =..... $12,500

Contingency and Administration $50,047

Findings

1. The proposed project includes the information necessary, plan sheets and erosion control plan for review.
2. Rules 4 and 5 will be met with the fulfilment of the conditions identified below.
3. The proposed stormwater management facility will provide volume retention, rate control and water quality management in accordance with subsections 4.3.1a-c criteria.
4. In accordance with NMCWD Rule 4.3.5, the applicant must provide a maintenance and inspection plan that identifies and protects the design, capacity and functionality of the stormwater management facility.
5. Although the district's floodplain management and drainage alterations rule does not apply to the project (Rule 2.0), in pre-development conditions, a portion of the site is inundated during high-water conditions. The on-site Atlas 14 100-year frequency flood elevation is elevation 898.7 M.S.L. that extends from the inundation area located along the western site limits at 10250 Crosstown Circle. The high-water level and resultant onsite inundation area is not regulated by NMCWD, as the area is not a natural waterbody or constructed facility.

Recommendation

Approval, contingent upon:

Compliance with the General Provisions (attached).

Financial Assurance in the amount of $171,300, $166,300 for stormwater management, erosion control, and site restoration, and $5,000 for compliance with the chloride management requirements.

The applicant providing a name and contact information for the individual responsible for the erosion and sediment control at the site. NMCWD must be notified if the responsible individual changes during the permit term.

Per Rule 4.3.5, a receipt showing recordation of a maintenance declaration for the operation and maintenance of the stormwater management facility is required. A draft of the declaration must be approved by the district prior to recordation.

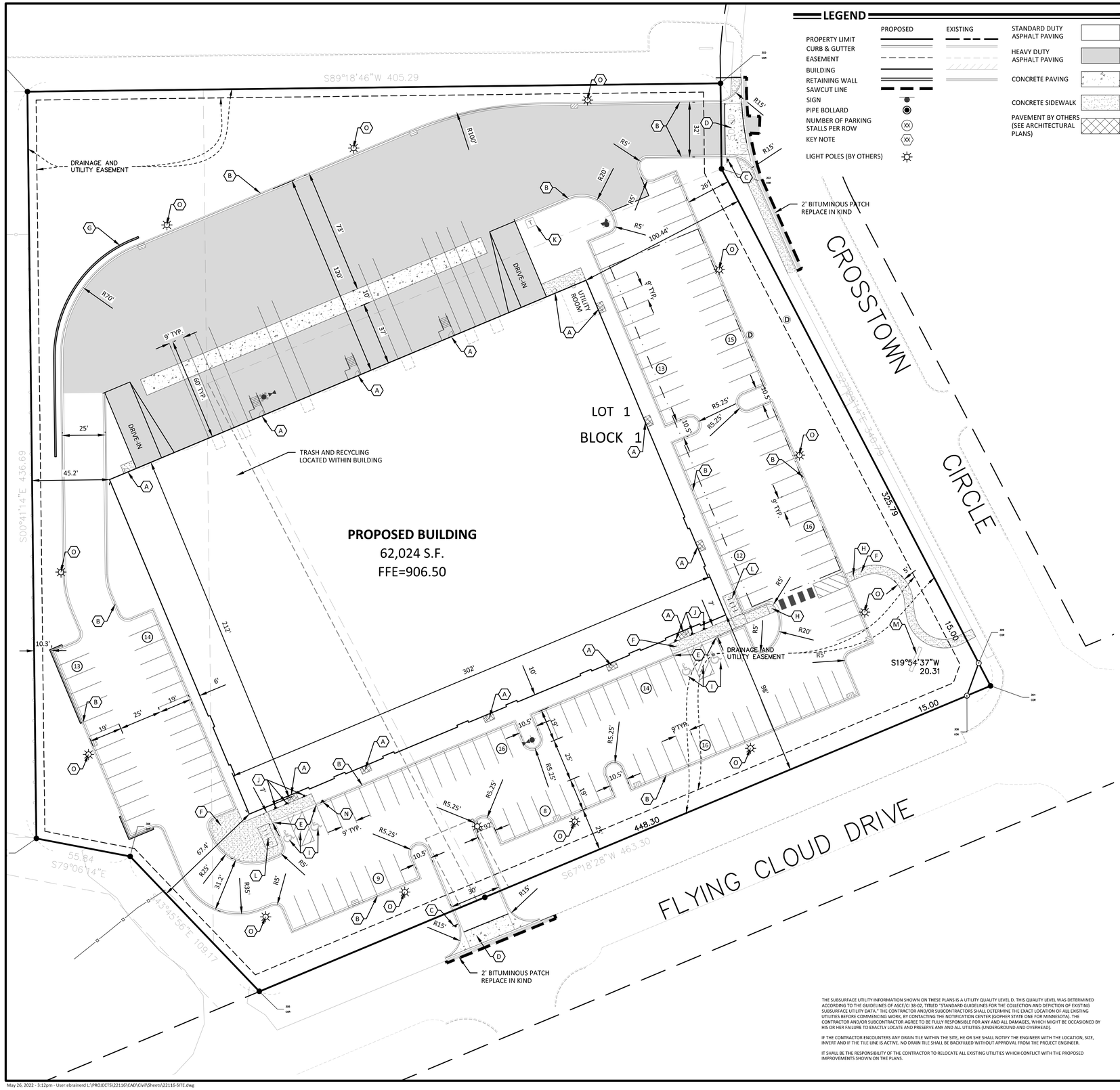
By accepting the permit, when issued, the applicant agrees to the following stipulations for closeout of the permit and release of the financial assurance after the project:

The work for the 10250 Crosstown Circle Redevelopment under the terms of Permit #2022-060 must have an impervious surface area and configuration materially consistent with the approved plans. Design that differs materially from the approved plans will need to be the subject of a request for a permit modification or new permit, which will be subject to review for compliance with all applicable regulatory requirements.

Per Rule 4.5.6, an as-built drawing of the stormwater management facility conforming to the design specifications, including a stage volume relationship in tabular form for the underground stormwater management facility, as approved by the district, must be provided.

Submission of a plan for post-project management of Chloride use on the site. The plan must include 1) the designation of an individual authorized to implement the chloride use plan and 2) the designation of a Minnesota Pollution Control Agency certified salt applicator engaged in the implementation of the chloride-use plan for the site. The release of the $5,000 of the financial assurance required for the chloride-management plan requires that chloride-management plan has been provided and approved by the District’s Administrator.

Per Rule 12.4.1b, demonstration and confirmation that the stormwater management facility has been constructed or installed and are functioning as designed and permitted. Verification, through daily observation logs and photographs, must be provided showing the stormwater management facility used for volume retention have drawn down within 48 hours from the completion of two 1-inch (approximate) separate rainfall events.



LEGEND

	PROPOSED	EXISTING
PROPERTY LIMIT		
CURB & GUTTER		
EASEMENT		
BUILDING		
RETAINING WALL		
SAWCUT LINE		
SIGN		
PIPE BOLLARD		
NUMBER OF PARKING STALLS PER ROW	XX	XX
KEY NOTE	XX	XX
LIGHT POLES (BY OTHERS)		

STANDARD DUTY ASPHALT PAVING	
HEAVY DUTY ASPHALT PAVING	
CONCRETE PAVING	
CONCRETE SIDEWALK	
PAVEMENT BY OTHERS (SEE ARCHITECTURAL PLANS)	

DEVELOPMENT SUMMARY

AREA	
LOT 1, BLOCK 1	108,864 SF 2.50 AC
PARCEL 1	110,140 SF 2.53 AC
GROSS SITE AREA	219,004 SF 5.03 AC
GROSS FLOOR AREA (OPTION 1)	
WAREHOUSE	32,012 SF
OFFICE	16,006 SF
MANUFACTURING	16,006 SF
BUILDING FOOTPRINT	62,024 SF
GROSS FLOOR AREA (OPTION 2)	
WAREHOUSE	51,219 SF
OFFICE	12,805 SF
MANUFACTURING	0 SF
BUILDING FOOTPRINT	62,024 SF
MAXIMUM BASE AREA RATIO (BAR)	0.3
PROVIDED BASE AREA RATIO (BAR)	0.29
MAXIMUM FLOOR AREA RATIO (FAR)	0.3 (1-STORY)
PROVIDED FLOOR AREA RATIO (FAR)	0.29
EXISTING IMPERVIOUS AREA	110,656 SF / 50.5%
EXISTING PERVIOUS AREA	108,348 SF / 49.5%
PROPOSED IMPERVIOUS AREA	158,676 SF / 72.5%
PROPOSED PERVIOUS AREA	60,328 SF / 27.5%
BUILDING SETBACKS	
FRONT YARD	50 FEET
REAR YARD	10 FEET
SIDE YARD	10 FEET
PARKING SETBACKS	
FRONT YARD	50 FEET
REAR YARD	10 FEET
SIDE YARD	10 FEET
EXISTING ZONING	
LOT 1, BLOCK 1	OFFICE
TRACT A	RLS NO. 1043 HIGHWAY COMMERCIAL
TRACT C & D	RLS NO. 943 RURAL
PROPOSED ZONING	
LOT 1, BLOCK 1	I-2
PARCEL 1	I-2
PARKING SUMMARY (OPTION 1)	
PARKING REQUIRED	144 STALLS
MANUFACTURING	48 STALLS
WAREHOUSE	16 STALLS
OFFICE	80 STALLS
PARKING PROVIDED	146 STALLS
PARKING SUMMARY (OPTION 2)	
PARKING REQUIRED	90 STALLS
MANUFACTURING	0 STALLS
WAREHOUSE	26 STALLS
OFFICE	64 STALLS
PARKING PROVIDED	146 STALLS

DEVELOPMENT NOTES

1. ALL DIMENSIONS ARE ROUNDED TO THE NEAREST TENTH FOOT.
2. ALL DIMENSIONS SHOWN ARE TO THE FACE OF CURB TO FACE OF CURB UNLESS OTHERWISE NOTED.
3. ALL CURB RADII ARE 5' UNLESS OTHERWISE NOTED.
4. CONTRACTOR SHALL REVIEW PAVEMENT GRADIENT AND CONSTRUCT "GUTTER OUT" WHERE WATER DRAINS AWAY FROM CURB. ALL OTHER AREAS SHALL BE CONSTRUCTED AS "GUTTER IN" CURB. COORDINATE WITH GRADING CONTRACTOR.
5. ALL AREAS ARE ROUNDED TO THE NEAREST SQUARE FOOT.
6. ALL PARKING STALLS TO BE 9' IN WIDTH AND 19' IN LENGTH UNLESS OTHERWISE INDICATED.
7. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF EXIT PORCHES, RAMPS, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.
8. SEE ARCHITECTURAL PLANS FOR PYLON SIGN DETAILS
9. SEE ARCHITECTURAL PLANS FOR LIGHT POLE FOUNDATION DETAIL AND LIGHTING PLAN FOR EXACT LOCATIONS OF LIGHT POLE.
10. ALL GRADIENTS ON SIDEWALKS ALONG THE ADA ROUTE HAVE BEEN DESIGNED WITH A MAXIMUM LONGITUDINAL SLOPE OF 4.5%, AND A MAXIMUM CROSS SLOPE OF 1.5%. THIS IS LESS THAN THE ADA CODE MAXIMUM LONGITUDINAL SLOPE OF 5% (1:20), EXCEPT AT CURB RAMPS (1:12), AND A MAXIMUM CROSS SLOPE OF 2.00% (1:50). THE MAXIMUM DESIGN SLOPE IN ANY DIRECTION ON AN ADA PARKING STALL OR ACCESS AISLE IS 1.5%, LESS THAN THE ADA CODE MAXIMUM SLOPE IN ANY DIRECTION ON AN ADA PARKING STALL OR ACCESS AISLE OF 2.00% (1:50). THE CONTRACTOR SHALL REVIEW AND VERIFY THE GRADIENT IN THE FIELD ALONG THE ADA ROUTES PRIOR TO PLACING CONCRETE OR BITUMINOUS PAVEMENT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF THERE IS A DISCREPANCY BETWEEN THE GRADIENT IN THE FIELD VERSUS THE DESIGN GRADIENT AND COORDINATE WITH GRADING CONTRACTOR.
11. "NO PARKING" SIGNS SHALL BE PLACED ALONG ALL DRIVEWAYS AS REQUIRED BY CITY.
12. REMOVE ALL EXISTING TREES AND CLEAR/GRUB WITHIN GRADING LIMITS PRIOR TO CONSTRUCTION.

KEY NOTES

A. BUILDING, STOOPS, STAIRS (SEE ARCHITECTURAL PLANS)
B. B-612 CONCRETE CURB AND GUTTER (SEE DETAIL R-9, SHEET C8.01)
C. STOP SIGN R1-1
D. CONCRETE APRON (SEE DETAILS R-14 & R-15, SHEET C8.01)
E. FLAT CURB SECTION (SEE DETAIL 01, SHEET C8.01)
F. CONCRETE SIDEWALK (SEE DETAIL 02, SHEET C8.01)
G. SEGMENTAL BLOCK RETAINING WALL (SEE DETAIL 05, SHEET C8.01)
H. ACCESSIBLE RAMP (SEE MNDOT PLATES, SHEET C8.03)
I. ACCESSIBLE STALL STRIPING (SEE DETAIL 04, SHEET C8.01)
J. ACCESSIBLE PARKING SIGN (SEE DETAIL 06, SHEET C8.01)
K. TRANSFORMER
L. BIKE RACK
M. MONUMENT SIGN (SEE ARCHITECTURAL PLANS)
N. ELECTRIC VEHICLE CHARGING STATION
O. SITE LIGHTING

THE SUBSURFACE UTILITY INFORMATION SHOWN ON THESE PLANS IS A UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF ASCE/CI 38-02, TITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA." THE CONTRACTOR AND/OR SUBCONTRACTORS SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, BY CONTACTING THE NOTIFICATION CENTER (GOPHER STATE ONE FOR MINNESOTA). THE CONTRACTOR AND/OR SUBCONTRACTOR AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES, WHICH MIGHT BE OCCASIONED BY HIS OR HER FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES (UNDERGROUND AND OVERHEAD).

IF THE CONTRACTOR ENCOUNTERS ANY DRAIN TILE WITHIN THE SITE, HE OR SHE SHALL NOTIFY THE ENGINEER WITH THE LOCATION, SIZE, INVERT AND IF THE TILE LINE IS ACTIVE. NO DRAIN TILE SHALL BE BACKFILLED WITHOUT APPROVAL FROM THE PROJECT ENGINEER.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

NORTH

0 30 60
SCALE IN FEET

Sambatek
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12800 Whitewater Drive, Suite 300
Minnetonka, MN 55343
763.476.6010 telephone
763.476.8532 facsimile
Engineering | Surveying | Planning | Environmental

Client
HEMPEL REAL ESTATE

80 SOUTH 8TH STREET, SUITE 1850
MINNEAPOLIS, MN 55402

Project
CROSSTOWN CORE INDUSTRIAL CENTER

Location
EDEN PRAIRIE, MN

10250 CROSSTOWN CIRCLE & 6534 FLYING CLOUD DRIVE

Certification

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly licensed professional ENGINEER under the laws of the state of Minnesota.

Erik W. Miller
Registration No. 41326 Date: 10/01/2021

If applicable, contact us for a wet signed copy of this plan which is available upon request at Sambatek's Minnetonka, MN office.

NOT FOR CONSTRUCTION

Summary

Designed: MLL Drawn: JGP
Approved: EWM Book / Page:
Phase: PERMIT Initial Issue: 10/01/2021

Revision History

No.	Date	By	Submittal / Revision
	3/15/2021	MLL	CITY COMMENT RESPONSE
	4/13/2021	MLL	CITY COMMENT RESPONSE
	6/30/2021	MLL	CITY COMMENT RESPONSE
	4/8/2022	BWF	PRICING SET
	4/28/2022	BWF	PERMIT SET
	5/26/2022	BWF	WATERSHED COMMENT RESPONSE

Sheet Title
SITE PLAN

Sheet No. Revision
C3.01

Project No. 22116

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