

## **AGENDA**

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1. ROLL CALL: Harris, Allen, Montemayor, Carlson Weinberg, Ulbrich
2. CONSIDERATION OF MINUTES
  - A. January 16, 2025 Planning Commission Meeting Minutes
3. PUBLIC HEARINGS
  - A. Conditional Use Permit for 3819 West Broadway
  - B. Variance Request for 3819 West Broadway
  - C. Zoning Text Amendment
4. OLD BUSINESS
5. NEW BUSINESS
6. OTHER BUSINESS
7. INFORMATION ONLY
8. ADJOURNMENT

**Draft MINUTES**

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**ROLL CALL**

Present: Commissioner Allen, Commissioner Weinberg, Chair Harris  
Absent: Commissioner Montemayor  
Staff: Heather Rand, Community Development Director; Will Bucheger, Assistant Planner

**CONSIDERATION OF MINUTES****A. November 21, 2024 Meeting Minutes**

Commissioner Weinberg MOVED, seconded by Commissioner Allen to approve the November 21, 2024, Planning Commission meeting minutes. The vote was unanimous and the motion carried.

**2025 MEETING DATES****A. 2025 Planning Commission Meeting Dates**

Chair Harris spoke on the staff report discussing the potential meeting dates for Planning Commission meetings for the 2025 year.

Rand spoke that the revised date in June due to Juneteenth Holiday, conflicts with another commission meeting and asked if they would like to push to another night.

Bucheger stated that he had a discussion with the City Clerk and that the night prior on June 25th, 2025, is available for the Planning Commission meeting.

Harris spoke that he has no issue switching the meeting to Wednesday June 25th, 2025. He then spoke that there was an error on the schedule and that the third Thursday in November is the 20th and not the 21st as it is shown. Allen pointed out that October 16 was MEA and should be changed to October 25th, as has been done in past years. Other commissioners accepted that suggestion.

Commissioner Weinberg MOVED, seconded by Commissioner Allen to approve the Planning Commission 2025 meeting dates with the alterations made by the Commission. The vote was unanimous and the motion carried.

Commissioner Allen spoke if they were going to elect officers at this meeting.

Bucheger spoke that there are absent Commissioners and then asked if they wanted to wait until all Commissioners are present for the vote.

Allen stated that she is comfortable waiting to vote on positions until the next Planning Commission meeting.

**PUBLIC HEARINGS****A. 3883 West Broadway Rezone**

Bucheger stepped forward and gave a staff presentation for 3883 West Broadway, an application to rezone from the current R-B Residential-business to B-2 Limited commercial so a proposed UPS store can



operate. He pointed out that the current R-B zoning standards prohibit 100 retail on the site though in the past, a dog grooming business had been located on site and there is ample retail parking. Site has been inactive for last couple years so no grandfathered use. A change in zoning to B-2 Limited commercial district is more in line with the city's comprehensive plan and will allow for the small retail UPS store use.

Harris asked if any residents contacted staff over this rezone and Bucheger stated staff received no comment on this item.

Commissioner Weinberg MOVED, seconded by Commissioner Allen to open the public hearing at 7:20 PM. The vote was unanimous and the motion carried. The public hearing had no members of public present to speak. Commissioner Weinberg MOVED, seconded by Commissioner Allen to close the public hearing at 7:20 PM. The vote was unanimous and the motion carried. The public hearing is now closed.

Commissioner Allen asked if the property owners intend to restripe the parking lot. Bucheger spoke that he is not aware of any restriping for that parking lot in the near future. Rand reminded planning commissioners that they are voting on a rezone, not a UPS store or parking lot stripping, but that after rezoning, the city building official would require restriping of parking lot for safety reasons as needed.

Commissioner Weinberg MOVED, seconded by Commissioner Allen to approve staff's recommendation of approval for the 3883 West Broadway rezone to B-2. The vote was unanimous.

B. 3819 West Broadway Conditional Use Permit (Agenda Item Postponed to future meeting)

## **OLD BUSINESS**

## **NEW BUSINESS**

## **INFORMATION ONLY**

Rand informed the commissioners that city staff have been preparing to bring zoning code text amendment language pertaining to the location and buffers of state licensed, adult use cannabis businesses to the next meeting. Rand also solicited some informal input from commissioners on current retail needs in the city.

Bucheger gave an update on 3819 West Broadway CUP and potential variance application that will likely be on next meeting agenda.

Lastly, staff presented a brief 2024 Planning Commission Annual Report and commissioners did not offer any suggested changes or edits. Staff explained the report would next be submitted to city council as required by city code.

## **ADJOURNMENT**

Commissioner Weinberg MOVED, seconded by Commissioner Allen to adjourn the meeting at 7:51 PM. The vote was unanimous and the motion carried.

TO: Planning Commission  
PREPARED BY: Will Bucheger, Assistant Planner  
DATE: February 20, 2025  
RE: Conditional Use Permit for 3819 West Broadway

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**Background:**

US Internet has submitted a CUP on behalf of the property owner Rbbnsdl Clnc Hldng Co Llc to redevelop the 0.45-acre property of 3819 West Broadway for the use of a “private utility building”. Redevelopment consists of demolishing the current Robbinsdale Clinic and constructing a 3935 square foot building in its place. The location is shown in **Attachments A**.

US Internet is requesting a Conditional Use Permit to be able to operate a private utility building at 3819 West Broadway. US Internet specializes in fiber optic internet service and wish to be able to use this property at a facility to branch out their product to the community and surrounding areas. US Internet is hoping to construct a 3935 square foot building with a rear yard parking lot for their operation. Staff review of the plan set noticed that the Transit Overlay District setback from West Broadway was not being met. The applicant has submitted a Variance application to abstain from this district’s setback standards.

On November [21, 2024](#), the Planning Commission reviewed a Zoning Text Amendment to allow the use of a “private utility building” within our Residential-Business Zoning District as well as a rezone of the subject property to the Residential-Business Zoning District. Both items received a recommendation of approval with no added conditions.

On [December 3, 2024](#), the City Council reviewed both items, heard a staff presentation and gave approval for both. Allowing the use of “private utility buildings” as a conditional use with the Residential-Business Zoning District and to rezone 3819 West Broadway into a Residential-Business Zoning District.

On January 9, 2025, US Internet submitted a 60-day extension request to allow for additional time due to practical challenges they faced meeting the Transit Overlay Districts design requirements.

On February 4, 2025, City staff met with the applicants and provided feedback to the proposed plan with general staff support.

**Location:**

Detailing the location of this proposed project is included with the applicant’s submittal. The project site is 0.45 acres and holds the following PID.

- 0602924410017

**Analysis:**

### **Comprehensive Plan:**

This property is guided by the City's Comprehensive Plan as a Mixed-Use Commercial future land use area, you can view this in **Attachment B**. A property designated for commercial mixed use will be expected to have some commercial or office uses as well as residential, even if residential becomes the primary use of the area or property. This proposed use coincides with our comprehensive plan.

### **Transit Overlay District Standards:**

A portion of this property is within the Transit Oriented Overlay (TOD) district. Implementation will result in pedestrian oriented buildings with built-to lines, additional reduction of parking requirements and increased building height allowances based upon adjacent right-of-way widths. This use and building are subject to the standards of this district. The entire plan set can be viewed in **Attachment C**.

### **Building Facades and Design Features**

- Setback – Commercial Buildings within the TOD along A-street (West Broadway) are required to have a 3 ft. maximum setback. This building does not accomplish this requirement and is pursuing a variance instead. The building has a 6ft. side yard setback which is being met. The rear yard setback standard within the TOD is based on the applicable zoning district the lot is within. This property is located inside the Residential-Business district, and this has a rear yard setback of 20% of the lots depth. The rear yard setback is also being met.
- Lot Coverage – The TOD has a lot coverage requirement of 80% for buildings only, the proposed project has a building coverage of 19%.
- Front Buildout – Buildings along A-street (West Broadway) within the TOD have a 70% minimum building frontage buildout requirement to fulfill the desired goal with the Comprehensive Plan. This requirement is being met with the building fronting 73% of West Broadway.
- Glazing – The TOD has a set desire to see certain glazing percentages on buildings within the TOD to show visual appeal within the downtown area. Buildings along A-street (West Broadway) are required to have 50% of the building frontage glazed. This requirement is being met.

### **Exterior Building Materials**

Buildings in the TOD are required to have exterior wall materials consisting of modular brick, natural stone; and/or Portland cement stucco or similar. Accent materials may be tile, stone, metal and/or wood. The proposed building consists of brick and stone for the main material. Accent material of the building includes prefinished metal fascia. These materials are compatible with the TOD standards.

### **Building Height**

This property is within the West Broadway Corridor section of the TOD. This area is permitted to construct a building to the height of three stories. This building is compliant.

### **Parking**

Off-street parking inside the TOD is encouraged to be done underground. This proposal is for 5 parking spaces with one handicap in the rear yard of the property with curb cut along Hubbard Ave as per City Engineering recommendation. City staff are comfortable with the amount of parking proposed. The TOD bases parking amounts off of the use of the property. The use of a

private utility building is not specified within the TOD, so staff had an internal review of the amount proposed and found it to be acceptable.

### Landscaping

Per the TOD, all open areas of any site, except for that portion used for parking, driveways, and storage, must be landscaped and incorporated in a landscape plan, conforming with the requirements of the General Performance Standards Section [510.25](#) of the code. The TOD requires that parking areas must be screened from public streets, sidewalks and paths by a landscaped frontage strip at least five feet wide, this standard is being met and is included within their landscaping plans. The City's Arborist has reviewed their landscaping plans and found them acceptable with the condition that three trees currently on the property be left untouched. These include two Scotch pine trees located in the southwest corner of the lot and a large heritage Black Locust tree located near the middle of the lot. The landscaping plan is in **Attachment C**.

### Signage

No signage is proposed with this project.

### City Engineer Review:

The City Engineer had an opportunity to review the proposed project and provided a comment dated January 6<sup>th</sup>, 2025, regarding comments on the project. Key comments from the memo are below:

- Any approval of the proposed building does not guarantee approval of any proposed conduit routes. All work in the Right-of-Way will require separate permits.
- All utilities to the new facility shall be underground.
- Given the disturbance to the site that will be caused during construction, it is recommended that all existing infrastructure, landscaping and appurtenances left over from the previous use of the site should be removed with new infrastructure and landscaping being provided. Comments made by the City Arborist are excluded.
- Parking spaces to be provided shall relate to the number of operational and service staff required at the facility with excess spaces being removed and converted to landscaping.

The Certificate of Occupancy should be withheld until a test can occur verifying that the outdoor generator while in operation is not breaking noise ordinance.

### **Conditional Use Findings of Facts:**

The Planning Commission shall make findings of fact regarding any adverse effects of the proposed conditional use and what additional requirements may be necessary to reduce such adverse effects. Its judgment shall be based upon, but not limited to, the following factors:

1. Consistency with the City Comprehensive Plan. ***The proposed private utility building supports the residential-business use which is consistent with the Comprehensive Plan.***
2. The geographical area involved. ***The neighboring properties have their buildings setback in a similar distance to West Broadway.***
3. Whether such use will cause deterioration of the area in which it is proposed. ***Staff do not see deterioration of the neighborhood because of this use.***
4. The character of the surrounding area. ***The building design and materials used are consistent with the neighboring buildings.***
5. The demonstrated need for such use. ***The applicant is requesting this use to be able to***

*operate their business within the city which will increase fiber optic internet service options for residents and businesses in Robbinsdale.*

6. Whether the proposed use would cause odors, dust, flies, vermin, smoke, gas, noise or vibration, or would impose hazards to life or property in the neighborhood. *The plan set for the building shows that they will not creating hazards to the surrounding areas. All fiber optic expansion in the city will be reviewed diligently by the Engineering Department. The noise created by this use will not be an issue since there is a city maximum decibel limit to ensure no noise violations occur.*
7. Whether such use would inherently lead to or encourage disturbing influences in the neighborhood. *The use will not lead to or encourage disturbing influences in the neighborhood.*
8. Whether stored equipment or materials would be screened and whether there would be continuous operation within the visible range of surrounding residences.

***Not applicable.***

**Public Hearing:**

Notice of this public hearing was published in the city's official newspaper and posted on the city's bulletin board 10 days prior to this meeting. Mailed notices have also went out to all properties 350 feet away from this address. City staff have received no inquiries from residents at the time of this report.

**Recommendation:**

1. Hold the public hearing.
2. Motion to recommend that the City Council approve Conditional use permit request Z25-2 to allow the use of a private utility building at 3819 West Broadway with the following conditions:
  - a. The generator on site will not exceed 70dBA.
  - b. This property will be permitted for a parking lot with 5 parking spaces including 1 handicap stall.
  - c. All future fiber optic cable installations inside of the public right of way must be routed in a manner authorized by the City Engineer with appropriate city permits applied for.
  - d. A city building permit is required prior to construction.

**Attachments:**

1. Attachment A - Hennepin County Aerial Map
2. Attachment B - Comprehensive Plan Map
3. Attachment C - US Internet Conditional Use Permit Plan Set
4. Attachment D - Draft Resolution
5. Attachment E - Public Hearing Notice
6. Attachment F - 60 Day Review Extension





PARCEL ID: 0602924410017

OWNER NAME: Rbbnsdl Cinc Hldng Co Llc

PARCEL ADDRESS: 3819 West Broadway, Robbinsdale MN 55422

PARCEL AREA: 0.45 acres, 19,527 sq ft

A-T-B: Abstract

SALE PRICE: \$245,000

SALE DATE: 09/1998

SALE CODE: Excluded From Ratio Studies

ASSESSED 2023, PAYABLE 2024

PROPERTY TYPE: Commercial-Preferred

HOMESTEAD: Non-Homestead

MARKET VALUE: \$655,000

TAX TOTAL: \$18,973.48

ASSESSED 2024, PAYABLE 2025

PROPERTY TYPE: Commercial

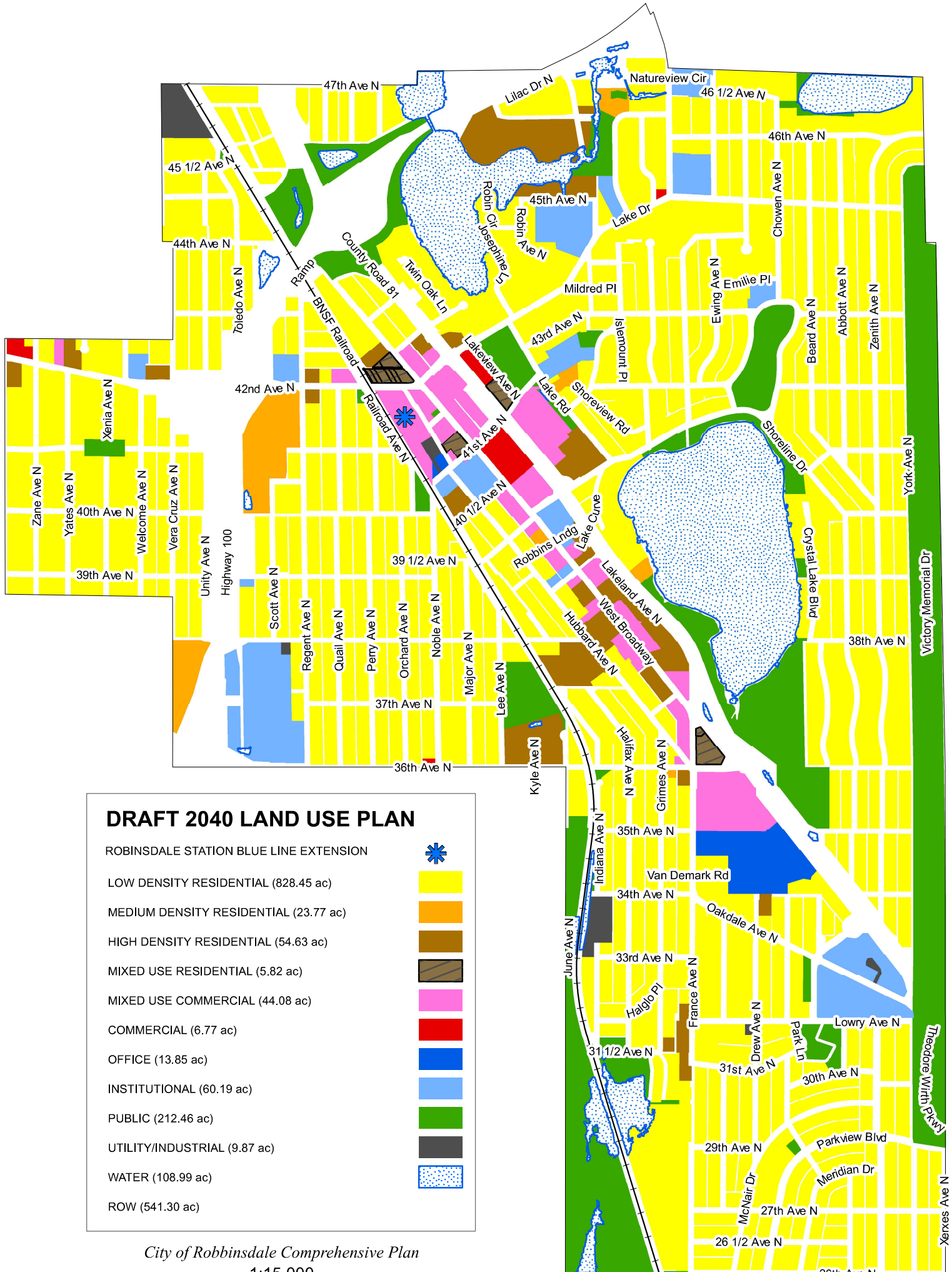
HOMESTEAD: Non-Homestead

MARKET VALUE: \$590,000

## Comments:

This data (i) is furnished 'AS IS' with no representation as to completeness or accuracy; (ii) is furnished with no warranty of any kind; and (iii) is not suitable for legal, engineering or surveying purposes. Hennepin County shall not be liable for any damage, injury or loss resulting from this data.

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COUNTY 2025







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**Conditional Use Permit Application - 3819 W Broadway, Robbinsdale, MN 55422**

**Contents**

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To review references visit our website at [www.robbinsdalemn.com](http://www.robbinsdalemn.com)

**CONDITIONAL USE PERMIT** (reference Section 535.01)

Applicant US Internet Corp.

Address 3819 W Broadway, Robbinsdale, MN 55422

Owner (if different from Applicant) \_\_\_\_\_

Owners Address 12450 Wayzata Blvd, Suite 315, Minnetonka, MN 55305

Day Phone # 612-401-5316 Cell Phone # 612-401-5316 E-mail address zjohnson@usinternet.com

Applicant's Authority (if other than Owner) \_\_\_\_\_

Legal Description of Property Lot 023 A Auditors Subd. No. 180 65x300.8

Present Zoning Classification R-B Existing Use of Property Medical and General Office

Area of Property 0.45 acres Section of Ordinance(s): 515.07. R-B Residential Business District

Please describe the proposed use/request in appropriate detail (attach additional sheets if necessary):  
US Internet is proposing a new internet utility service building / data center building. US Internet requests a conditional use permit for this site to allow the Data Center.

Application for rezoning, conditional use permit, non-conforming use permit or zoning text amendment will not be accepted until the applicant has provided the information required by the applicable sections of the zoning code (see above reference). The minimum information is summarized below:

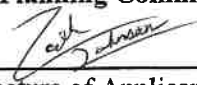
1. **Detailed written and graphic material fully explaining the request.**
2. **Certificate of Survey of property (3 copies) showing the following:**
  - A. **Location and dimensions of the existing and proposed structure(s) along with setbacks on the lot.**
  - B. **Location and use of adjacent structures.**
3. **Existing scaled floor plans, scaled elevations, and any proposed changes.**
4. **Application Fee**
5. **Floodplain Information, if applicable (see back page).**

**Applications must be received 4 weeks prior to the Planning Commission meeting at which request is to be heard.**

Application Deadline: 12-19-2024 Application Fee **\$250.00** \*, \*\* Receipt # 48151

Planning Commission Date 01-16-2025 \*City Council Date(s) 01-21-2025 & 02-04-2025  
(\*Tentative: final date will be announced at the Planning Commission meeting.)

The undersigned acknowledges/declares that all the facts and representations stated in this application are true and by signing, acknowledges the cost and the procedure for the processing of this application and certifies that the property described by the provided address is not tax delinquent. Furthermore, undersigned grants City staff entry upon the land in question to perform any necessary site inspections during the duration of the project. **Applicant should be represented at the Planning Commission meeting and the City Council public hearing.**

  
\_\_\_\_\_  
Signature of Applicant (and Owner if other than applicant)

12-18-2024  
\_\_\_\_\_  
Date

**\*Applicant may be liable for additional expense such as legal fees.**

**\*\*Applicant may be billed for additional staff time.**

## **Written Narrative - 3819 W Broadway, Robbinsdale, MN 55422**

### **Summary of Request**

US Internet is proposing a new internet utility service building / data center building on this site, located between West Broadway and Hubbard Ave N. The site is currently zoned as an R-B residential-business district with a TOD overlay. There is currently one building on the site that operates as a medical clinic. The proposed use of a data center is permitted in the zoning district, permitted a conditional use permit is granted.

### **City Comprehensive Plan**

US Internet requests a conditional use permit be granted due to the building's ability to fulfill the purpose of the residential-business district which is to provide for the transition in land use from residential to business. The residential scale of the building, along with its professional use exemplifies this zoning district and creates a smooth transition between the neighboring R-1 single family residential district, and the denser R-B district.

### **Geographical Area & Need for Use**

Located in between W Broadway and Hubbard Ave N, the site bridges an R-1 single family residential district and an R-B residential business district. The introduction of the data center will allow US Internet to expand their internet and data center services to the Robbinsdale neighborhood with minimal disturbance to the current city fabric. There is no reason to believe the data center will cause deterioration in the surrounding area or attract disturbing influences in the neighborhood. The new building will blend in with the residential scale and fit the existing identity of the surrounding neighborhood through a simple form and complimentary materials.

### **Equipment & Operation**

#### **HVAC**

The proposed building will likely include 2 Liebert MCS056 units (see attached specification sheet), 2 furnaces, and 2 condenser type systems, or comparable. These units will likely be placed on the roof and screened. The existing building has 4 or 5 units currently. The new HVAC equipment will produce noise levels very similar to what the current medical building is currently running.

#### **Generator**

The generator will be placed at the rear of the building and enclosed on four sides with a full height CMU structure and a critical exhaust silencer. The decibel level of the generator without the enclosure is 80 db, however, the CMU enclosure will further reduce the decibel level and entirely conceal the unit from view of all neighbors. According to the Institute for Research in Construction, 8" block walls have a sound transmission class (STC) of between 45-50 which roughly equates to decibel levels, meaning the CMU enclosure will greatly reduce the noise levels of the generator. The enclosure will also continue the brick veneer siding to match the rest of the building.

The generator will not run often, as it is for emergency power only. There will be an exercise cycle once a month for a period of 35 to 60 minutes. This can be programmed for any specific time and day. As requested, it will only occur Monday - Friday between 9am and 3pm, excluding holidays. The generator will be sized to provide power to the complete facility upon a power failure from the local Electrical Utility for 24/7 operation until power is restored. Once power is restored, it will go through a cool down cycle for 35 minutes and then turn off. The generator is required for all electronics and cooling of USI equipment to ensure they can provide the best service to their customers.

We appreciate your consideration.

## **Electrical Information - 3819 W Broadway, Robbinsdale, MN 55422**

A well-designed DC power system for computers can be very efficient, with high-quality DC-DC converters achieving efficiencies around 95% or higher, meaning that roughly 95% of the input power is converted to usable power for the computers, making it significantly more efficient than traditional AC power. Below is more information regarding the building power usage and generator:

### Power Usage:

- 600A 120/208V 3 phase Electrical service with full generator back-up.
- All interior and exterior lighting
- Water heater is electric on demand
- Cooling and heating for building common area RTU
- Cooling for Switch room are two 10-ton Liebert CRAC units.
- Electrical for Switch room: A -48V Rectifier/DC plant with Batteries will provide the power for all the Switching equipment. There is also a 10 KVA UPS for two pieces of equipment that run on 120V. Both the Rectifier plant and the UPS provide constant power to cover an electrical outage until the Generator starts and is online. Having these items ensures all equipment has a constant and clean energy source that is more efficient and reliable than being on only utility power
- A similar site, built approximately 5 years ago, had a 2024 average monthly demand of 37.22 KW (103.39 amps at 120/208V 3 phase) and average Monthly usage was 24511.56 KWH. Usage will go up as more pieces of equipment are added, but this shows a good average of what is currently being used. Every month electrical consumption and demand are very similar. This is due to the efficiency of the DC plant, cooling equipment and electronic equipment. There is not the typical high usage and low usage due to time of day and customer traffic in other commercial facilities. The size of the electrical service and generator installed is also for redundancy in the case of any outage from Utility

### Generator Information:

- Generator Size: 265KW 15'-6" Length x 6'-0" W x 7'-10" Height 11,025 LBS
- Generator Enclosure: Level 2 Weather and Soundproof aluminum housing corrosion resistant with powder with baked on enamel powder coat and Critical Exhaust silencer
- Fuel Source: Natural Gas
- DB Level: 80 db
- The generator will be located outside the main building and surrounded by Block/Brick walls to conceal the unit. The enclosed walls will further reduce the db level and the generator will be behind the block/brick walls
- The generator is for Emergency only when there is a loss of power. There will be an exercise cycle once a month for a period of 35 to 60 minutes. This can be programmed for any specific time and day
- The generator will be sized to provide power to the complete facility upon a power failure from the local Electrical Utility for 24/7 operation until power is restored. Once power is restored, it will go through a cool down cycle for 35 minutes and then turn off
- The generator is required for all Electronics and Cooling of USI equipment
- For more information, see attached specifications sheet on page 17

## **Responses to City Comments from 02.04.25**

### **Tree Preservation**

US Internet is committed to preserving as many trees on this site as possible. There is currently a black locust tree, identified as a heritage tree, located about 100' from W Broadway along the southern property line. Due to the tree's size and its close proximity to the existing building, which will be demolished, it would be incredibly difficult to preserve. Most of the tree's roots are beneath the existing parking lot and building foundation and would receive significant damage during demolition.

However, two Scotch pines located in the southwest corner of the property, near Hubbard Ave, will be preserved. These trees are noted on the landscape plan with specific preservation instructions for the construction phase. The remaining trees are either already dead, in poor health, or otherwise cannot be preserved due to their proximity to the demolition and construction areas.

### **Landscape Design**

A winding driveway was recommended for access to the parking lot, adding security and visually enhancing the rear of the building from the street. While we acknowledge the reasoning behind the suggestion, we believe that a winding driveway would ultimately be more harmful than beneficial. To preserve the existing Scotch pines on the southwest corner, the driveway would need to curve closer to the neighboring residential property, potentially increasing noise and disturbances for the residents. Also, a curved driveway requires more surface area than a straight one, leading to wasted materials, reduced planting space, and the creation of more impervious surfaces, which could result in potential water runoff issues.

Additionally, the inclusion of landscape boulders was recommended to add security to the front of the building. However, with the 30-foot setback, boulders are not needed for security, and incorporating more plantings would be a more visually appealing choice.



ALTA/NSPS LAND TITLE SURVEY FOR:  
US INTERNET

LEGAL DESCRIPTION:

Lot 23, Auditor's Subdivision No. 180, according to the plat thereof on file and of record, Hennepin County, Minnesota

Abstract property

GENERAL SURVEY NOTES:

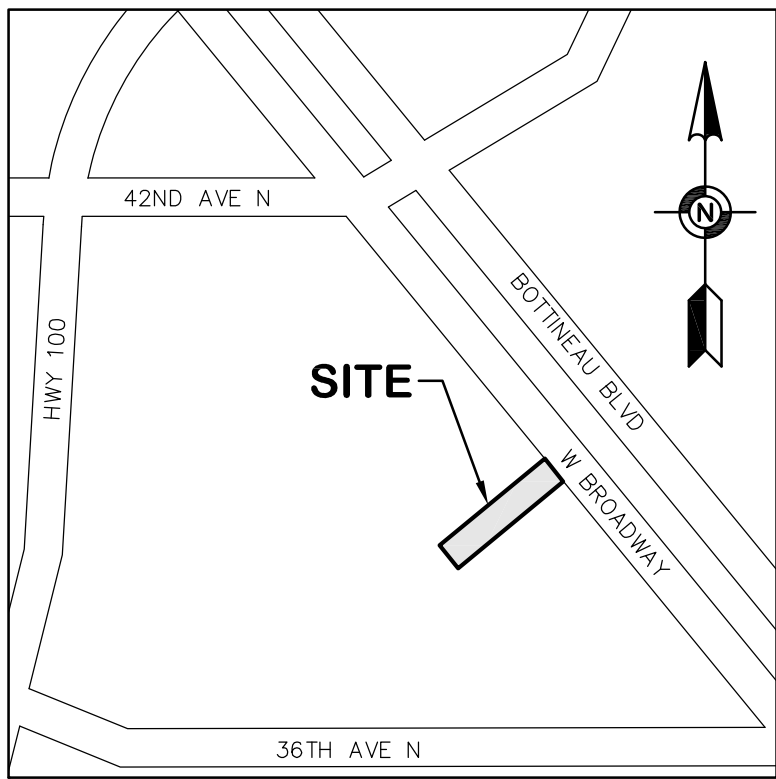
- The orientation of this bearing system is based on the Hennepin County coordinate grid (NAD 83-2011 Adj.).
- The legal description and easement information used in the preparation of this survey is based on the Commitment for Title Insurance prepared by Old Republic National Title Insurance Company, Commitment No. ORTE750222 dated September 29, 2024 at 7:00 A.M..
- The surveyed property has direct access to West Broadway and Hubbard Avenue North, both being right of ways.
- No evidence of cemeteries, burial grounds or gravesites was observed in the process of conducting the fieldwork.

OPTIONAL TABLE A ITEMS:

- Monuments have been placed at all major corners of the surveyed property described hereon, unless already marked or referenced by existing monuments or witnesses in close proximity to the corner.
- The address of the property described hereon is 3819 West Broadway Robbinsdale, Minnesota 55422
- The property described hereon lies within Flood Zone "X" (areas of minimal flood hazard) per Federal Insurance Rate Map No. 27053C 0214 F, dated November 4, 2016.
- The total area of the property described hereon is 19,647 square feet or 0.45103 acres.
- No zoning report or letter was received from the insurer pursuant to Optional Table A Item 6(a), as set forth in the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys.
- Exterior building dimensions are depicted hereon.
- The exterior building footprint area at ground level is depicted hereon.
- The measured building height is depicted hereon.
- Substantial features observed in the process of conducting the fieldwork are depicted hereon.
- As of the date of this survey the property described hereon contains a total of 1 handicapped space.
- Existing utilities, services and underground structures shown hereon were located either physically, from existing records made available to us, by resident testimony, or by locations provided by Gopher State One Call, per Ticket No. 242782685. However, lacking excavation, the exact location of underground features cannot be accurately, completely and reliably depicted. Where additional or more detailed information is required, the client is advised that excavation may be necessary. Other utilities and services may be present and verification and location of all utilities and services should be obtained from the owners of the respective utilities prior to any design, planning or excavation.
- The names of adjoining owners according to current tax records are depicted hereon.
- The intersection of West Broadway and 39th Avenue North is located 400 feet Northwest of the Northwest corner of the surveyed property.
- As of the date of this survey there is no observable evidence of current earth moving work, building construction or building additions on the property described hereon.
- The plottable offsite easements or servitudes disclosed in documents provided to the surveyor are depicted hereon.

SURVEY ITEMS PER SCHEDULE B:

There are no survey related items in Schedule B, Part II



VICINITY MAP  
NOT TO SCALE

CERTIFICATION:

To U. S. Internet Corp., a Minnesota Corporation; Robbinsdale Clinic Holding Company, LLC, a Minnesota limited liability company; and Old Republic National Title Insurance Company:

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 6(a), 7(a), 7(b)(1), 7(c), 8, 9, 11(a), 13, 14, 16, and 18 of Table A thereof. The fieldwork was completed on October 11, 2024.

Date of Plat or Map: October 17, 2024

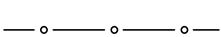
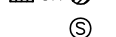
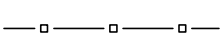
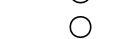
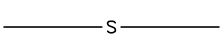
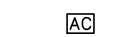
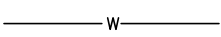
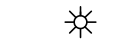
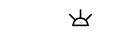
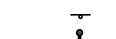
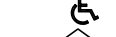
  
Eric A. Roeser  
Minnesota License No. 47476  
eroeser@efnsurvey.com

GOPHER STATE ONE CALL NOTE:

List of utilities notified per Gopher State One Call Ticket No. 242782685.

COMCAST  
CITY OF ROBBINSDALE  
CITY OF ROBBINSDALE FIBER  
CENTURYLINK - CTCLQ  
CENTER POINT ENERGY  
MCI  
METRO TRANSIT FACILITIES  
NORTH MEMORIAL HOSPITAL  
XCEL ENERGY

LEGEND:

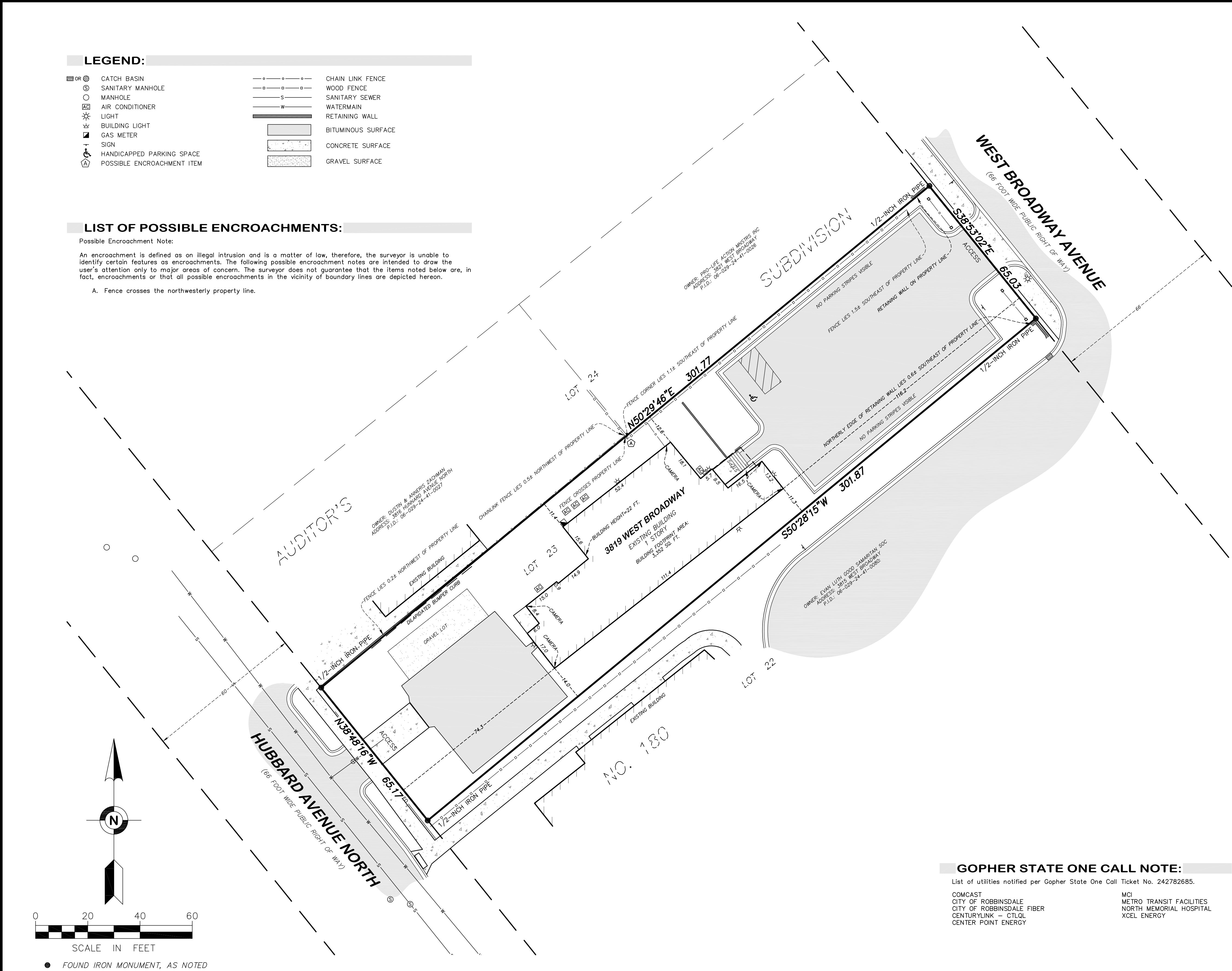
- |                                                                                                              |                                                                                                      |
|--------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
|  CATCH BASIN                |  CHAIN LINK FENCE   |
|  SANITARY MANHOLE           |  WOOD FENCE         |
|  MANHOLE                    |  SANITARY SEWER     |
|  AIR CONDITIONER            |  WATERMAIN          |
|  LIGHT                      |  RETAINING WALL     |
|  BUILDING LIGHT             |  BITUMINOUS SURFACE |
|  GAS METER                  |  CONCRETE SURFACE   |
|  SIGN                       |  GRAVEL SURFACE     |
|  HANDICAPPED PARKING SPACE  |                                                                                                      |
|  POSSIBLE ENCROACHMENT ITEM |                                                                                                      |

LIST OF POSSIBLE ENCROACHMENTS:

Possible Encroachment Note:

An encroachment is defined as an illegal intrusion and is a matter of law, therefore, the surveyor is unable to identify certain features as encroachments. The following possible encroachment notes are intended to draw the user's attention only to major areas of concern. The surveyor does not guarantee that the items noted below are, in fact, encroachments or that all possible encroachments in the vicinity of boundary lines are depicted hereon.

- Fence crosses the northwesterly property line.



| FIELD BOOK                   | PAGE | FIELDWORK CHIEF: | REVISIONS |      |             |
|------------------------------|------|------------------|-----------|------|-------------|
|                              |      | LV               | NO.       | DATE | DESCRIPTION |
|                              |      | DRAWN BY: DAV    |           |      |             |
|                              |      | CHECKED BY: EAR  |           |      |             |
| DRAWING NAME: 42286 ALTA.dwg |      |                  |           |      |             |
| JOB NO. 42286                |      |                  |           |      |             |
| FILE NO. 5087                |      |                  |           |      |             |

ALTA/NSPS  
LAND TITLE SURVEY

SURVEY FOR:

US INTERNET

PROPERTY ADDRESS:

3819 West Broadway  
Robbinsdale, Minnesota 55422



475 Old Highway 8 NW, Suite 200  
New Brighton, Minnesota 55112  
PHONE: (612) 466-3300  
WWW.EFNSURVEY.COM  
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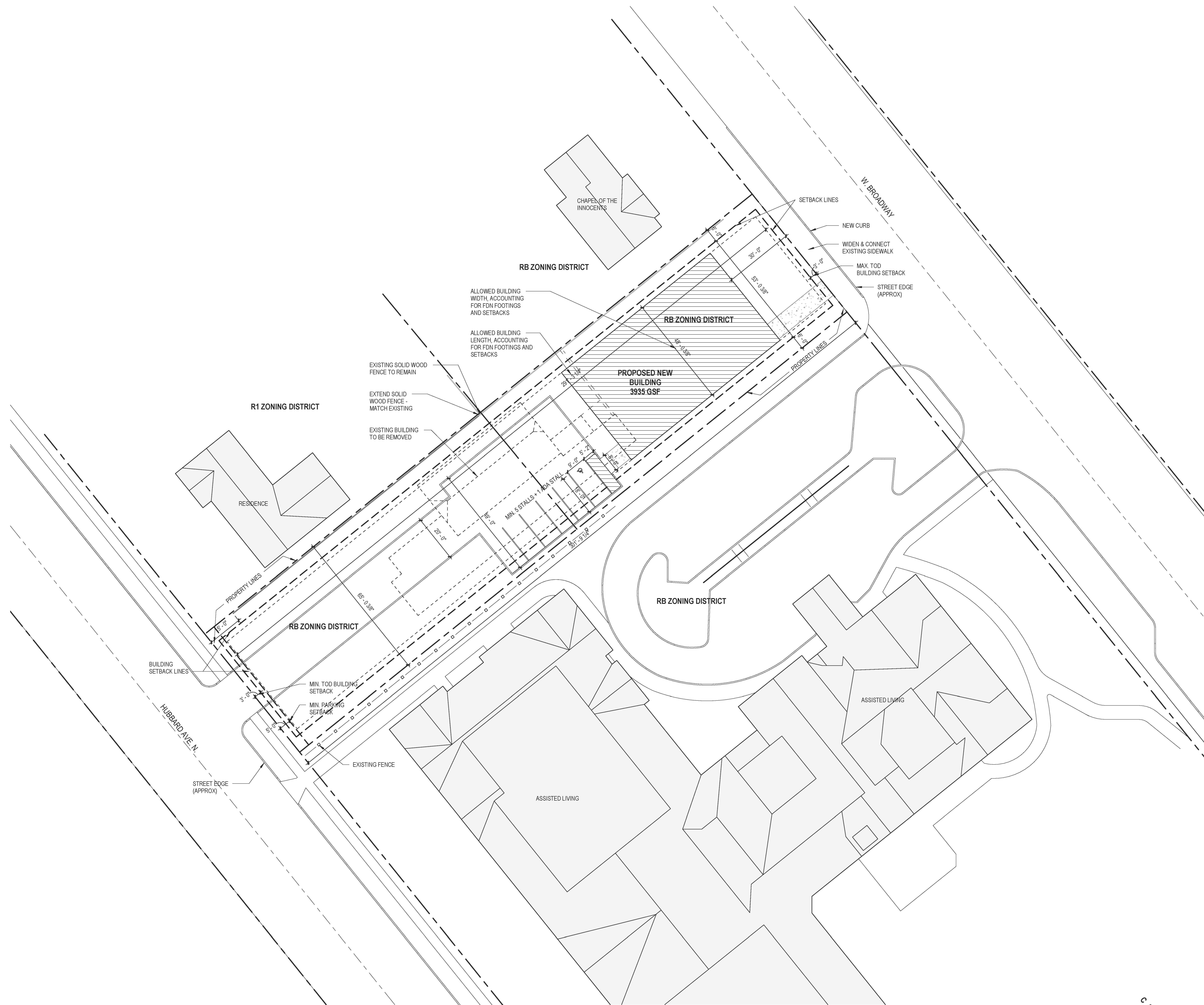
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ROBBINSDALE CO  
BUILDING

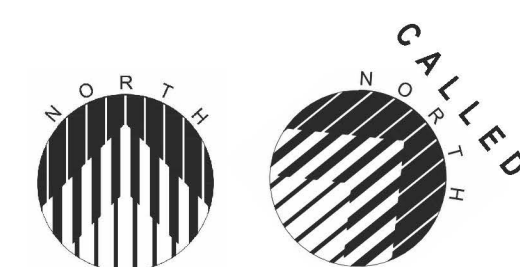
3819 WEST BROADWAY  
ROBBINSDALE, MN  
ZONING PLAN

|                |          |
|----------------|----------|
| PROJECT NUMBER | 24-033   |
| DATE           | 02/10/25 |
| DRAWN BY       | LFM      |
| CHECKED BY     | TLM      |

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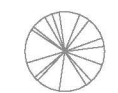
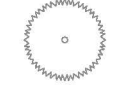
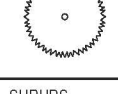
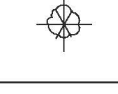


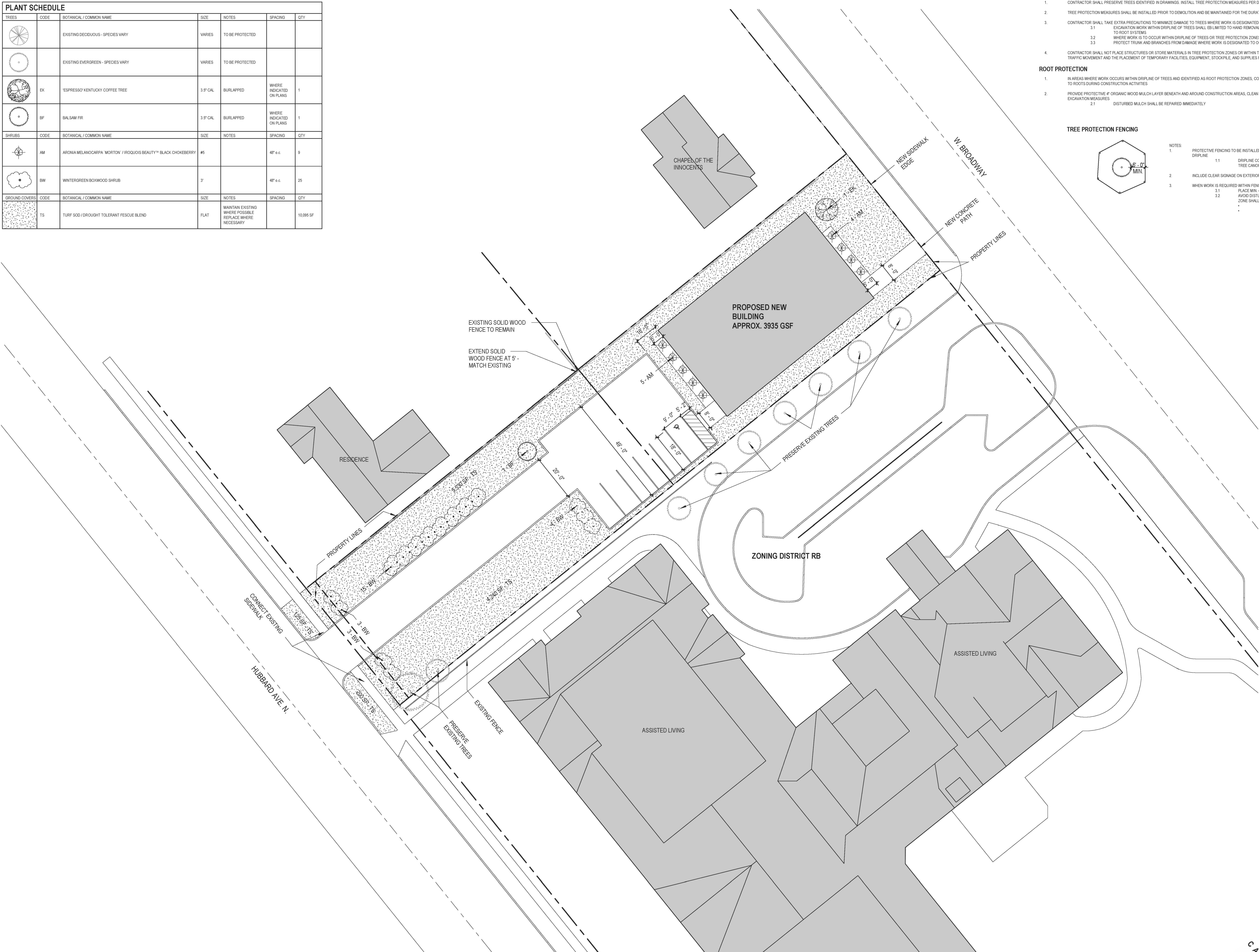
1 SITE PLAN  
1" = 20'-0"





S:\CURRENT PROJECTS\2024 - Projects\24-033 - US Internet - Robbinsdale CO Building\Drawings\MODEL\24-033 US Internet Robbinsdale\_12-17-24.rvt

| PLANT SCHEDULE                                                                    |      |                                                                 |           |                                                            |                          |           |
|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------|-----------|------------------------------------------------------------|--------------------------|-----------|
| TREES                                                                             | CODE | BOTANICAL / COMMON NAME                                         | SIZE      | NOTES                                                      | SPACING                  | QTY       |
|  |      | EXISTING DECIDUOUS - SPECIES VARY                               | VARIABLES | TO BE PROTECTED                                            |                          |           |
|  |      | EXISTING EVERGREEN - SPECIES VARY                               | VARIABLES | TO BE PROTECTED                                            |                          |           |
|  | EK   | 'ESPRESSO' KENTUCKY COFFEE TREE                                 | 3" CAL    | BURLAPPED                                                  | WHERE INDICATED ON PLANS | 1         |
|  | BF   | BALSAM FIR                                                      | 3" CAL    | BURLAPPED                                                  | WHERE INDICATED ON PLANS | 1         |
| SHRUBS                                                                            | CODE | BOTANICAL / COMMON NAME                                         | SIZE      | NOTES                                                      | SPACING                  | QTY       |
|  | AM   | ARONIA MELANOCARPA 'MORTON' / IROQUOIS BEAUTY™ BLACK CHOKEBERRY | #5        |                                                            | 48" o.c.                 | 9         |
|  | BW   | WINTERGREEN BOXWOOD SHRUB                                       | 3"        |                                                            | 48" o.c.                 | 25        |
| GROUND COVERS                                                                     | CODE | BOTANICAL / COMMON NAME                                         | SIZE      | NOTES                                                      | SPACING                  | QTY       |
|  | TS   | TURF SOG / DROUGHT TOLERANT FESCUE BLEND                        | FLAT      | MAINTAIN EXISTING WHERE POSSIBLE. REPLACE WHERE NECESSARY. |                          | 10,095 SF |



TREE PRESERVATION NOTES

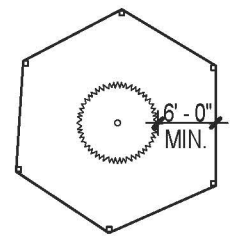
TREE PROTECTION

- CONTRACTOR SHALL PRESERVE TREES IDENTIFIED IN DRAWINGS. INSTALL TREE PROTECTION MEASURES PER DETAILS.
- TREE PROTECTION MEASURES SHALL BE INSTALLED PRIOR TO DEMOLITION AND BE MAINTAINED FOR THE DURATION OF THE CONSTRUCTION PERIOD.
- CONTRACTOR SHALL TAKE EXTRA PRECAUTIONS TO MINIMIZE DAMAGE TO TREES WHERE WORK IS DESIGNATED TO OCCUR WITHIN AND ADJACENT TO THE DRIPLINE OF TREES.
  - EXCAVATION WORK WITHIN DRIPLINE OF TREES SHALL BE LIMITED TO HAND REMOVAL, DIRECTIONAL BORING, AND AIR KNIFE ONLY TO MINIMIZE DAMAGE TO ROOT SYSTEMS.
  - WHERE WORK IS TO OCCUR WITHIN DRIPLINE OF TREES OR TREE PROTECTION ZONES, PROVIDE ROOT PRUNING.
  - PROTECT TRUNK AND BRANCHES FROM DAMAGE WHERE WORK IS DESIGNATED TO OCCUR WITHIN THE DRIPLINE.
- CONTRACTOR SHALL NOT PLACE STRUCTURES OR STORE MATERIALS IN TREE PROTECTION ZONES OR WITHIN THE DRIPLINE OF TREES. TREE PROTECTION FENCE SHALL PREVENT TRAFFIC MOVEMENT AND THE PLACEMENT OF TEMPORARY FACILITIES, EQUIPMENT, STOCKPILE, AND SUPPLIES FROM HARMING VEGETATION.

ROOT PROTECTION

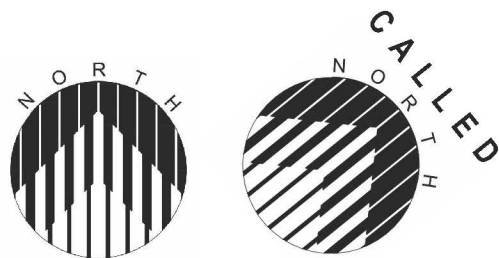
- IN AREAS WHERE WORK OCCURS WITHIN DRIPLINE OF TREES AND IDENTIFIED AS ROOT PROTECTION ZONES, CONTRACTOR SHALL USE EXTRA PRECAUTION TO MINIMIZE DISTURBANCE TO ROOTS DURING CONSTRUCTION ACTIVITIES.
- PROVIDE PROTECTIVE 4" ORGANIC WOOD MULCH LAYER BENEATH AND AROUND CONSTRUCTION AREAS, CLEAN ROOT CUTTINGS BY ISA CERTIFIED ARBORIST, AND LOW-IMPACT EXCAVATION MEASURES.
  - DISTURBED MULCH SHALL BE REPAIRED IMMEDIATELY.

TREE PROTECTION FENCING



- NOTES:
- PROTECTIVE FENCING TO BE INSTALLED MINIMUM 6' FROM TREE DRIPLINE.
    - DRIPLINE CONSIDERED AREA DIRECTLY BELOW TREE CANOPY.
  - INCLUDE CLEAR SIGNAGE ON EXTERIOR OF FENCING INDICATING THE TREE PRESERVATION AREA.
  - WHEN WORK IS REQUIRED WITHIN FENCE AREA:
    - PLACE MIN. 4" DEPTH ORGANIC WOOD MULCH.
    - AVOID DISTURBANCE WITHIN CRITICAL ROOT ZONE. CRITICAL ROOT ZONE SHALL BE MEASURED FROM TRUNK OUTWARD AND CALCULATED AS FOLLOWS:
      - DBH < 20" USE 1 FOOT RADIUS PER 1 INCH DBH; MIN 3' RADIUS.
      - DBH > 20" USE 1.5 FOOT RADIUS PER 1 INCH DBH.

1 LANDSCAPE PLAN  
1" = 20'-0"



308 W. Superior St.  
Suite 1600  
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REVISIONS

| No. | Description | Date   |
|-----|-------------|--------|
| 1   | Revision 1  | Date 1 |
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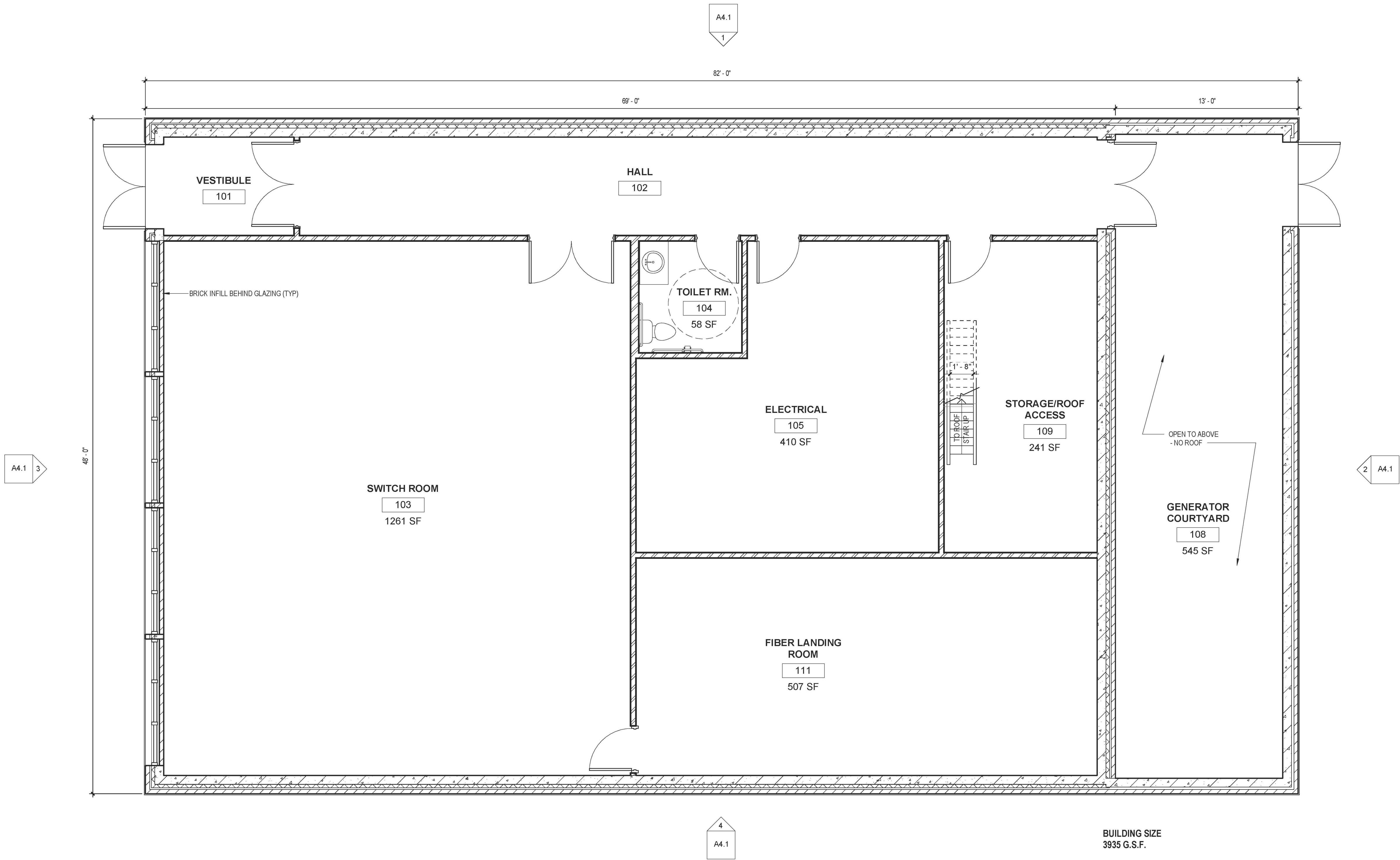
3819 WEST BROADWAY  
ROBBINSDALE, MN  
LANDSCAPING PLAN

PROJECT NUMBER 24-033  
DATE 02/10/25  
DRAWN BY LFM  
CHECKED BY TLM

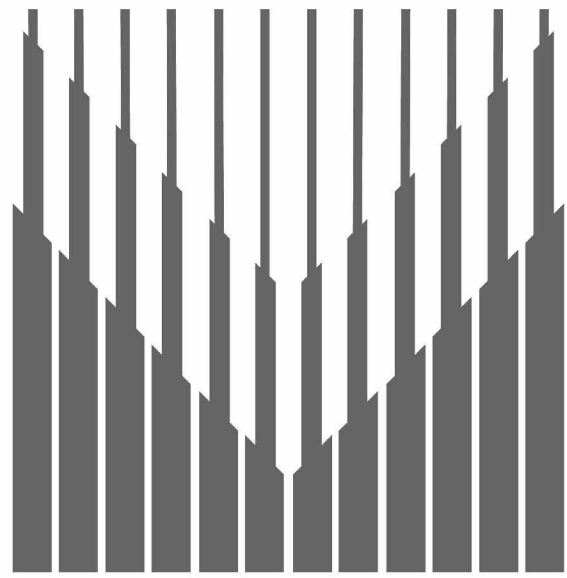
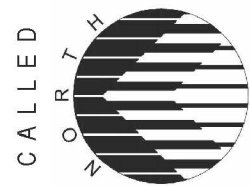
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S:\CURRENT PROJECTS\2024 - Projects\24-033 - US Internet - Robbinsdale CO Building\Drawings\MODEL\24-033 US Internet Robbinsdale\_12-17-24.rvt



1 FLOOR PLAN  
1/4" = 1'-0"



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US INTERNET  
ROBBINSDALE CO  
BUILDING

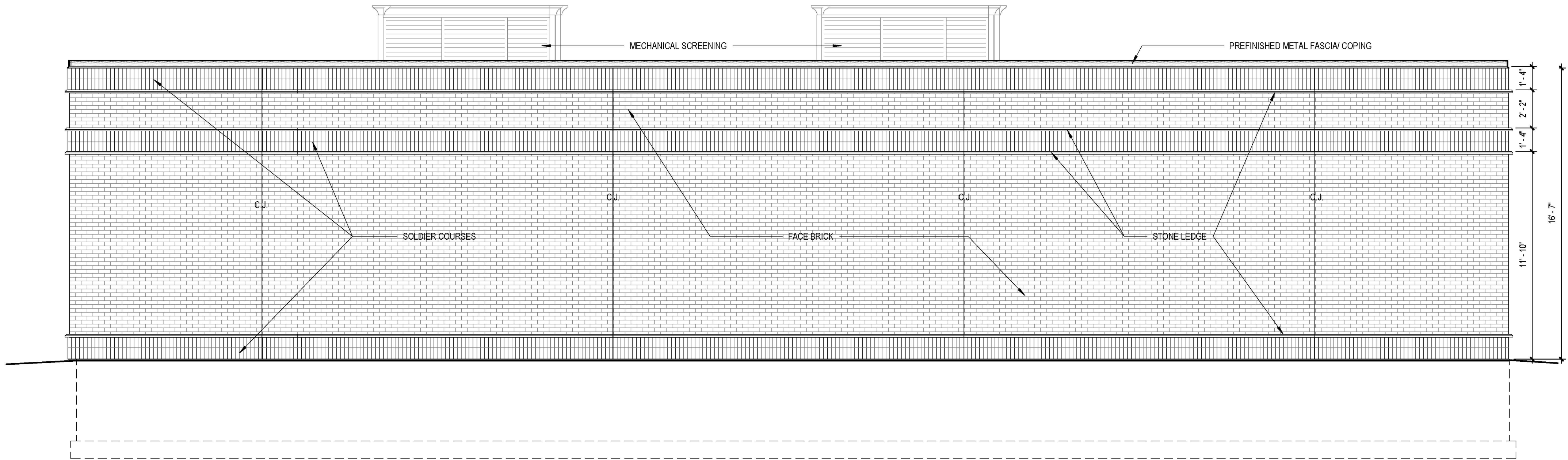
3819 WEST BROADWAY  
ROBBINSDALE, MN  
PLANS

PROJECT NUMBER 24-033  
DATE 02/10/25  
DRAWN BY LFM  
CHECKED BY TLM

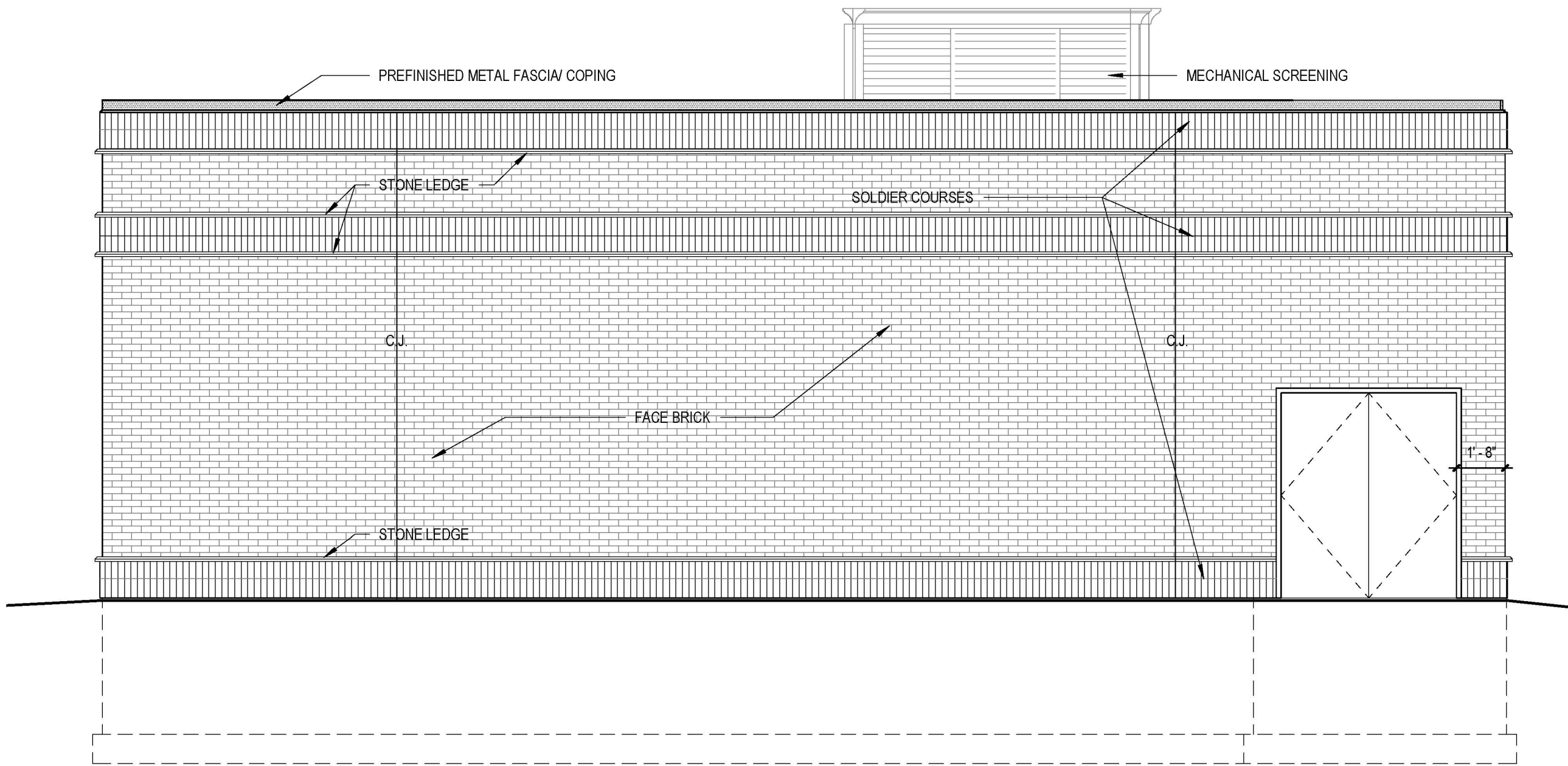
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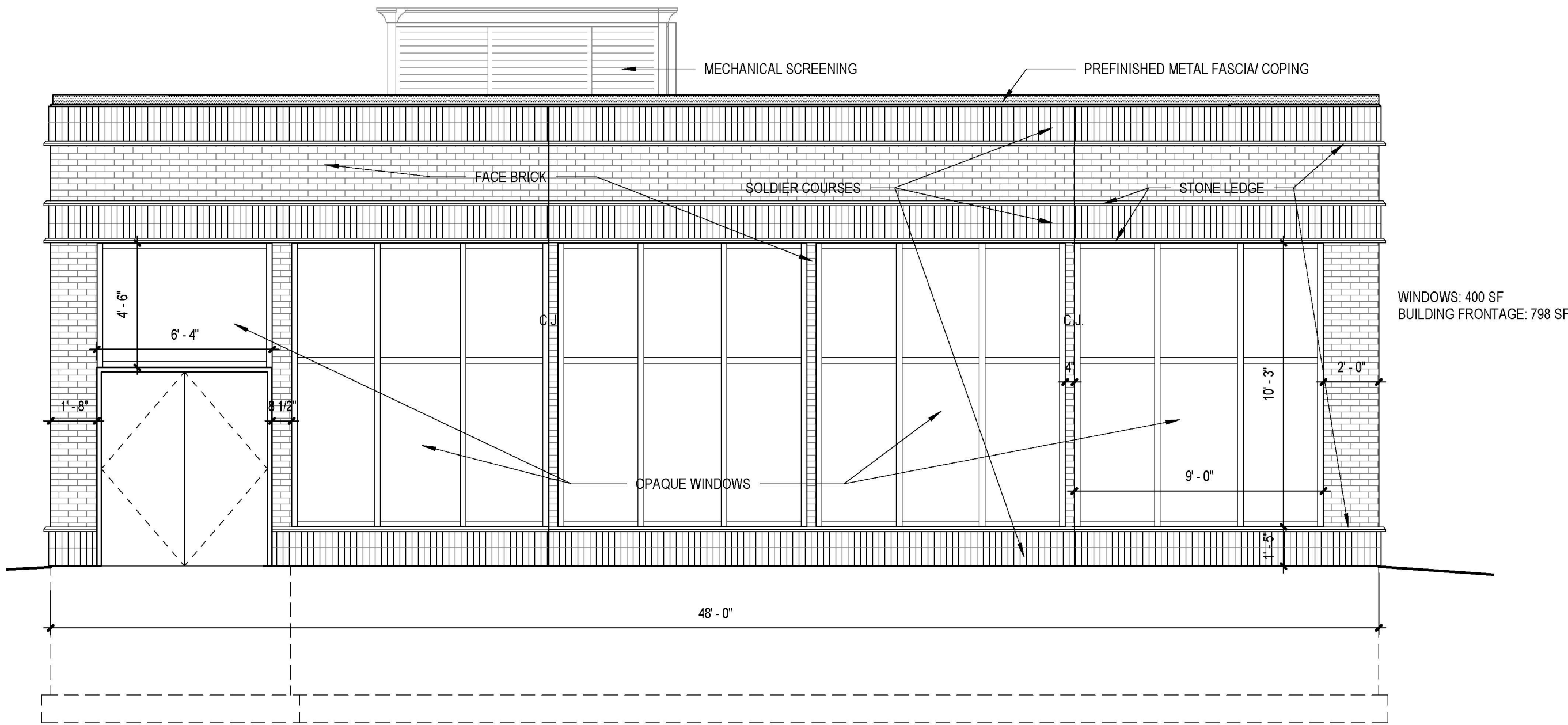
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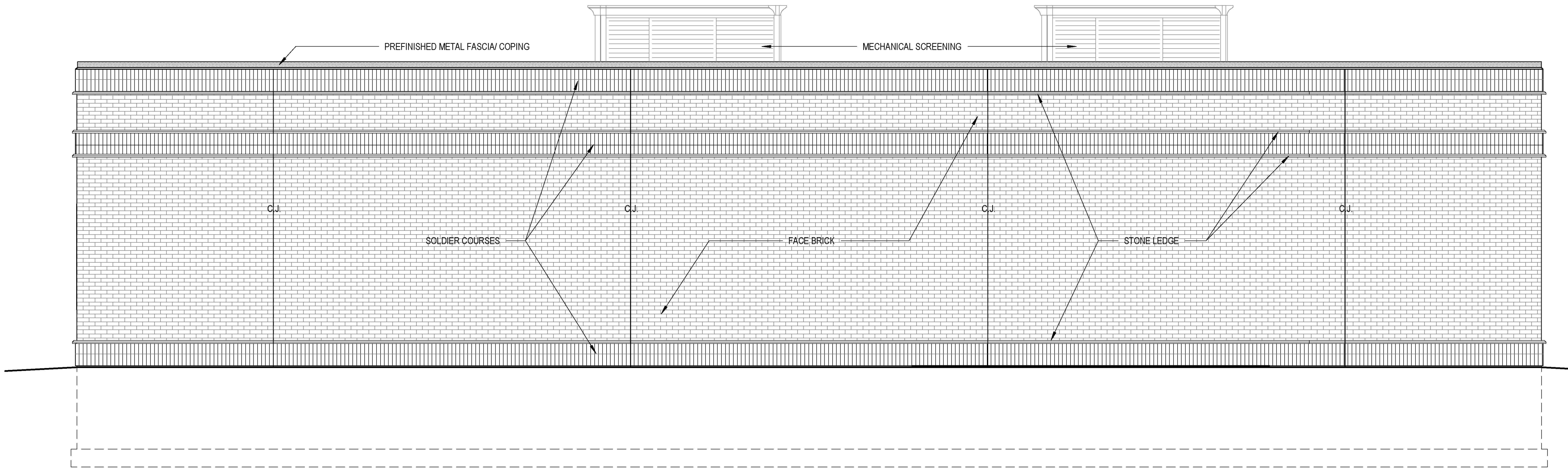
1 EAST ELEVATION  
1/4" = 1'-0"



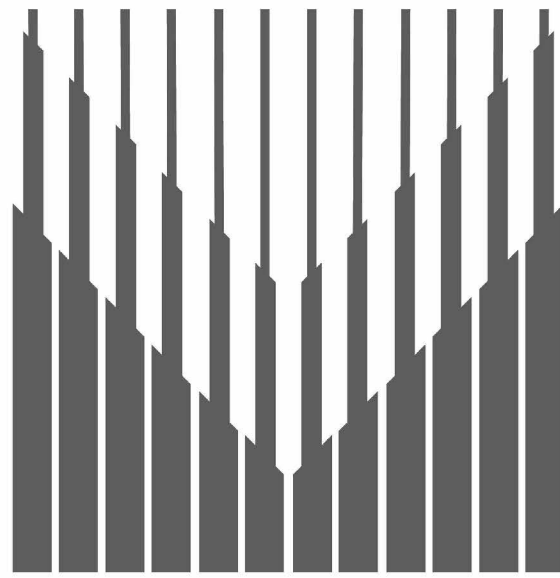
2 SOUTH ELEVATION  
1/4" = 1'-0"



3 NORTH ELEVATION  
1/4" = 1'-0"



4 WEST ELEVATION  
1/4" = 1'-0"



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US INTERNET  
ROBBINSDALE CO  
BUILDING

3819 WEST BROADWAY  
ROBBINSDALE, MN  
EXTERIOR ELEVATIONS

|                |          |
|----------------|----------|
| PROJECT NUMBER | 24-033   |
| DATE           | 02/10/25 |
| DRAWN BY       | LFM      |
| CHECKED BY     | TLM      |

A4.1









**USI Robbinsdale**

Preliminary Rendering

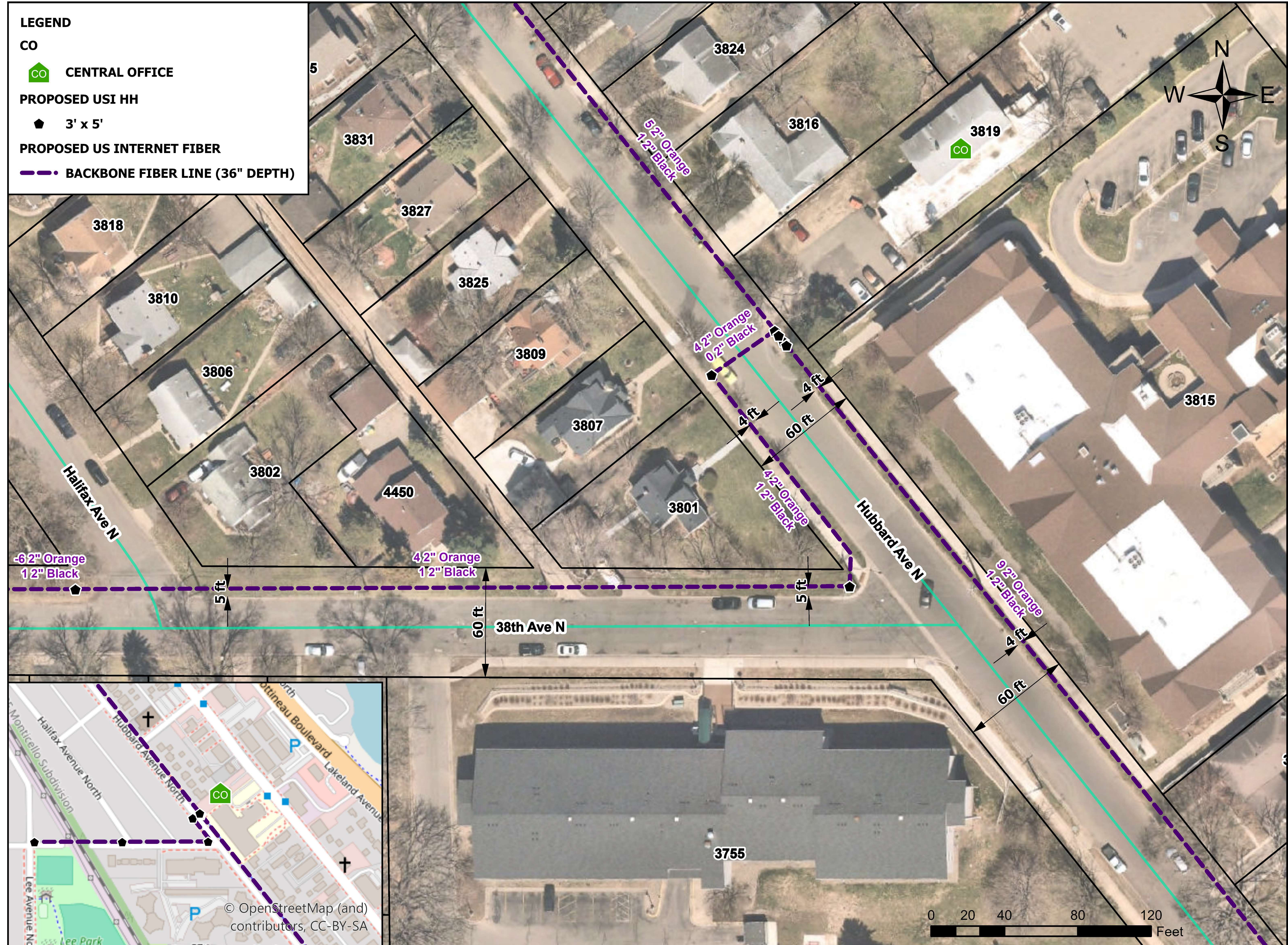
View from Hubbard Ave N

02-10-2025





# US INTERNET PLANNED FIBER ROUTE ROBBINSDALE CENTRAL OFFICE







**Liebert®**

MC™ Microchannel Coil Condenser

High Efficiency, Quiet Operation Air  
Cooled Condenser





As IT budgets constrict, data center managers require new, higher levels of energy efficiency to provide the innovations and technologies that today's critical business needs demand.

The Liebert® MC Condenser from Vertiv™ is an air-cooled condenser designed to deliver energy efficiency. With an exclusive microchannel coil design, this condenser offers a highly efficient, system matched heat rejection solution that reduces energy costs and operational expenses.

## The Liebert MC Condenser:

- Improves unit and system efficiency at full and partial loads
- Increases condenser full load energy efficiency by 30-50%
- Reduces refrigerant volumes and decreases refrigerant charge levels in matched condensers – by more than 50% on condensers without flooded receiver systems and more than 20% on condensers equipped with flooded receiver systems
- Is compatible with Copeland® Digital Scroll™ Technology compressors

## Lowest Total Cost of Ownership:

- Electrically Commutated (EC) Fans reduce annual condenser energy requirements 50-95% over traditional condensers
- Liebert MC condenser reduces annual energy requirements of Computer Room Air Conditioning (CRAC) systems by 5-10% (15-25% for flooded receiver systems)
- Reduced refrigerant requirements - lower installation cost
- Microchannel coil provides enhanced energy efficiency and 20-50% lighter installed weight

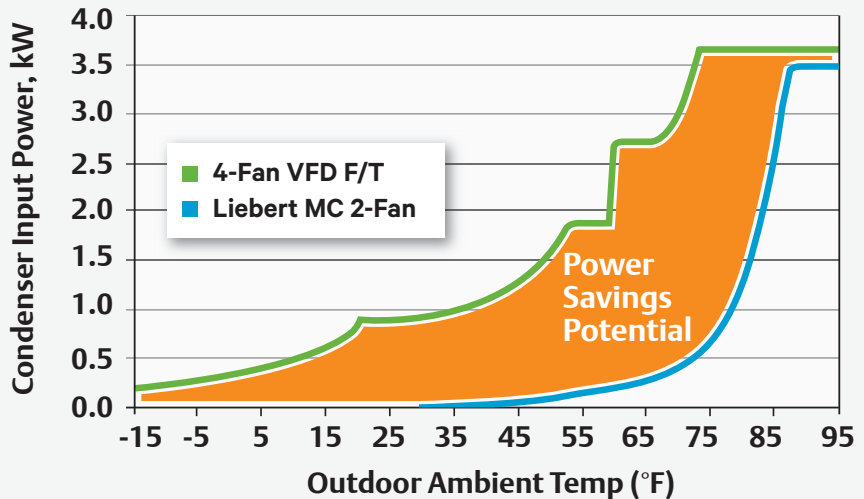
## EFFICIENT, QUIET AIR COOLED CONDENSER

### Liebert MC Condenser Energy Savings – Reduced Operating Expenses

Liebert MC condenser operates with higher efficiency than fin and tube condensers, with an annual savings of up to 85%. The savings are even greater when the flooded receiver system winter operation option is applied.

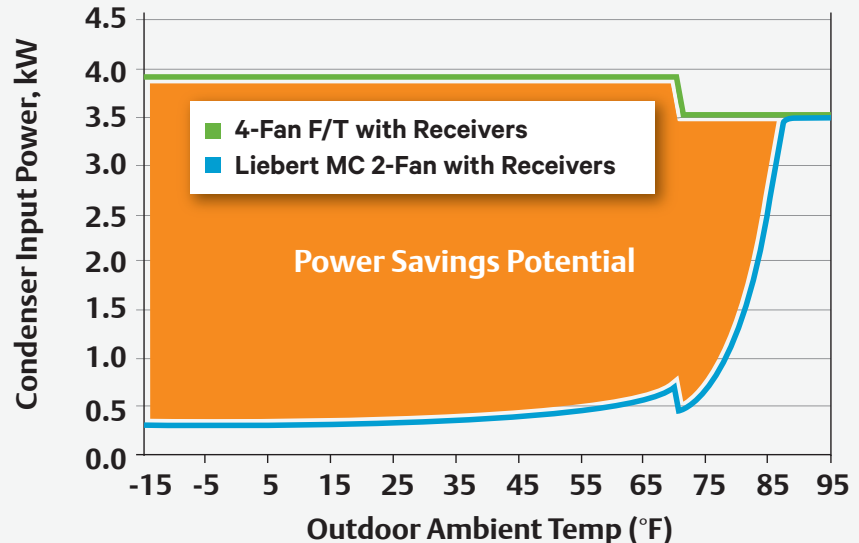
#### Standard Ambient Systems

##### 30 Ton Liebert DS @ 100% Load



#### Low Ambient Systems (Flooded Receiver)

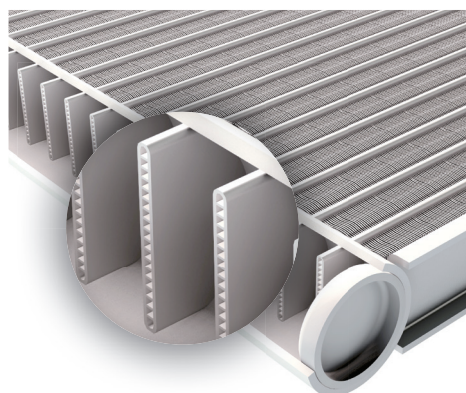
##### 30 Ton Liebert DS @ 100% Load





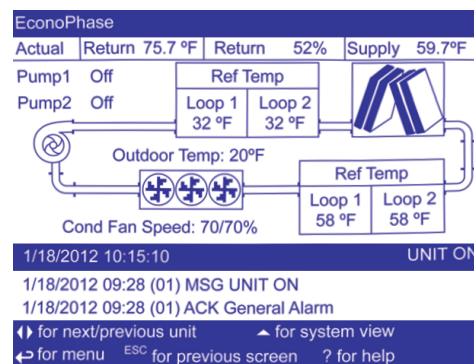
## Flexibility:

- Multiple voltage configurations available to match electrical needs
- 2.5 - 5.5 dBA lower sound level than alternative condensers, allowing installation in regulated environments
- Condenser is compatible with R-410A and R-407C refrigerants
- Quietline mode of operation - automatically controlled by the Liebert® iCOM™ indoor unit to operate fans at reduced speeds resulting in reduced sound levels



Microchannel Aluminum Coils

The Liebert MC Condenser leverages cutting-edge technologies such as a microchannel coil and EC fans, to deliver unmatched levels of operational efficiency.



Liebert MC is compatible with indoor cooling units equipped with Copeland® Digital Scroll™ Technology compressors and Liebert iCOM controls, allowing variable speed operation for cooling efficiency and reduced operating costs.

## Higher Availability:

- Liebert® iCOM from indoor cooling system to condenser communications improve condenser control, and offer enhanced monitoring capability both at the Liebert iCOM local display and at a BMS interface
- Highly reliable and efficient fan motor and controls
- Helps systems meet government energy efficiency standards, seismic and wind load regulations to IBC2007, and OSHPD compliance
- Industry's largest factory-trained service organization provides scheduled maintenance, 24 x 7 support, local parts, and an average 4 hour response time for service



One-Fan Microchannel Coil Condenser



Two-Fan Microchannel Coil Condenser



Four-Fan Microchannel Coil Condenser

## Liebert® MC™ Condenser – Technical Specifications

| LIEBERT MC MODEL | REFRIGERANT TYPE | # OF FANS | REFRIGERANT CHARGE, LB | LIEBERT MC SOUND PRESSURE, DBA | WEIGHT, LB |
|------------------|------------------|-----------|------------------------|--------------------------------|------------|
| MCS028           | R-407C or R-410A | 1         | 2.5                    | 60                             | 154        |
| MCS056           |                  | 2         | 5                      | 63                             | 288        |
| MCM040           |                  | 1         | 3.5                    | 65                             | 231        |
| MCM080           |                  | 2         | 8.5                    | 68                             | 441        |
| MCM160           |                  | 4         | 17                     | 71                             | 860        |
| MCL055           |                  | 1         | 5                      | 68                             | 344        |
| MCL110           |                  | 2         | 10                     | 71                             | 602        |
| MCL165           |                  | 3         | Liebert DSE Only       | 73                             | 891        |
| MCL220           |                  | 4         | 25                     | 74                             | 1186       |

Note: Standard (Non flooded receiver systems), Sound @ 10'

## Ideally Suited For Use With:

- Liebert CRV™
- Liebert Challenger™ 3000
- Liebert DS™
- Liebert DSE™





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# GILLETTE GENERATORS

LIQUID COOLED NAT. GAS ENGINE GENERATOR SET

60 HZ MODEL

**SP-2650**

| Model                   | STANDBY<br>120°C RISE |     |      |
|-------------------------|-----------------------|-----|------|
|                         | HZ                    | LPG | N.G. |
| <b>SP-2650-60 HERTZ</b> | 60                    | 170 | 265  |



All generator sets are USA prototype built and thoroughly tested. Production models are USA factory built and 100% load tested.



**UL2200, UL1446, UL508, UL142, UL498**



**NFPA 110, 99, 70, 37**

All generator sets meet NFPA-110 Level 1, when equipped with the necessary accessories and installed per NFPA standards.



**NEC 700, 701, 702, 708**



**NEMA ICS10, MG1, ICS6, AB1**



**ANSI C62.41, 27, 59, 32, 480, 40Q, 81U, 360-05**

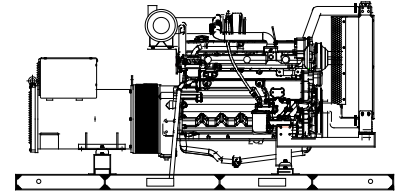


**ASCE 7-05 & 7-10**

All generator sets meet 180 MPH rating.

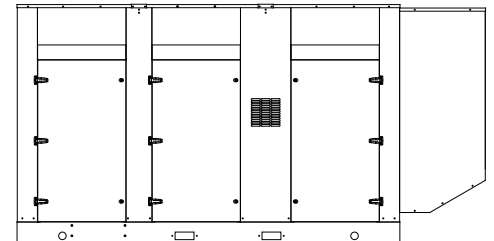


**EPA 40CFR Part 60, 1048, 1054, 1065, 1068**



“OPEN” GEN-SET

There is no enclosure, so gen-set must be placed within a weather protected area, un-inhabited by humans or animals, with proper ventilation. Silencer not supplied, as installation requirements are not known. However, this item is available as optional equipment.



“LEVEL 2” HOUSED GEN-SET

Full aluminum weather protection and superior sound attenuation for specific low noise applications. Critical grade muffler is standard

## GENERATOR RATINGS

|                     |         |     |    |    | LIQUID PROPANE GAS FUEL   |     | NATURAL GAS FUEL          |     |
|---------------------|---------|-----|----|----|---------------------------|-----|---------------------------|-----|
| GENERATOR MODEL     | VOLTAGE |     | PH | HZ | 120°C RISE STANDBY RATING |     | 120°C RISE STANDBY RATING |     |
|                     | L-N     | L-L |    |    | KW/KVA                    | AMP | KW/KVA                    | AMP |
| <b>SP-2650-3-2</b>  | 120     | 208 | 3  | 60 | 170/212                   | 590 | 265/331                   | 921 |
| <b>SP-2650-3-3</b>  | 120     | 240 | 3  | 60 | 170/212                   | 512 | 265/331                   | 798 |
| <b>SP-2650-3-4</b>  | 277     | 480 | 3  | 60 | 170/212                   | 256 | 265/331                   | 399 |
| <b>SP-2650-3-5</b>  | 127     | 220 | 3  | 60 | 170/212                   | 558 | 265/331                   | 870 |
| <b>SP-2650-3-16</b> | 346     | 600 | 3  | 60 | 170/212                   | 205 | 265/331                   | 319 |

RATINGS: All three phase gen-sets are 12 lead windings, rated at .8 power factor. 120°C “STANDBY RATINGS” are strictly for gen-sets that are used for back-up emergency power to a failed normal utility power source. This standby rating allows varying loads, with no overload capability, for the entire duration of utility power outage. All gen-set power ratings are based on temperature rise measured by resistance method as defined by MIL-STD 705C and IEEE STD 115, METHOD 6.4.4. All generators have class H (180°C) insulation system on both rotor and stator windings. All factory tests and KW/KVA charts shown above are based on 120°C (standby) R/R winding temperature, within a maximum 40°C ambient condition. Generators operated at standby power ratings must not exceed the temperature rise limitation for class H insulation system, as specified in NEMA MG1-22.40. Specifications & ratings are subject to change without prior notice.



# APPLICATION AND ENGINEERING DATA FOR MODEL SP-2650-60 HZ

## GENERATOR SPECIFICATIONS

Manufacturer.....Stamford Electric Generators  
Model & Type..... S4L1DD-311, 4 Pole, 12 Lead, Three Phase  
..... HCI434D-17, 4 Pole, 4 Lead, 600V, Three Phase  
Exciter.....Brushless, shunt excited  
Voltage Regulator.....Solid State, HZ/Volts  
Voltage Regulation.....½%, No load to full load  
Frequency.....Field convertible, 60 HZ to 50 HZ  
Frequency Regulation.....½% (½ cycle, no load to full load)  
Unbalanced Load Capability.....100% of standby amps  
Total Stator and Load Insulation.....Class H, 180°C  
Temperature Rise.....120°C R/R, standby rating @ 40°C amb.  
3 Ø Motor Starting @ 30% Voltage Dip (208-240V).....500 kVA  
3 Ø Motor Starting @ 30% Voltage Dip (480V).....780 kVA  
3 Ø Motor Starting @ 30% Voltage Dip (600V).....845 kVA  
Bearing.....1, Pre-lubed and sealed  
Coupling.....Direct flexible disc  
Total Harmonic Distortion.....Max 3½% (MIL-STD705B)  
Telephone Interference Factor.....Max 50 (NEMA MG1-22)  
Deviation Factor.....Max 5% (MIL-STD 405B)  
Ltd. Warranty Period.....24 Months from date of start-up or  
.....1000 hours use, first to occur.

## GENERATOR FEATURES

- World Renown Stamford Electric Generator having UL-1446 certification on full amortisseur windings.
- Full generator protection with **Deep Sea 7420** controller, having UL-508 certification.
- Automatic voltage regulator with over-excitation, under-frequency compensation, under-speed protection, and EMI filtering. Entire solid-state board is encapsulated for moisture protection.
- Generator power ratings are based on temperature rise, measured by resistance method, as defined in MIL-STD 705C and IEEE STD 115, Method 6.4.4.
- Power ratings will not exceed temperature rise limitation for class H insulation as per NEMA MG1-22.40.
- Insulation resistance to ground, exceeds 1.5 meg-ohm.
- Stator receives 2000 V. hi-potential test on main windings, and rotor windings receive a 1500 V. hi-potential test, as per MIL-STD 705B.
- Complete engine-generator torsional acceptance, confirmed during initial prototype testing.
- Full load testing on all engine-generator sets, before shipping.
- Self ventilating and drip-proof & revolving field design

## ENGINE SPECIFICATIONS AND APPLICATIONS DATA

### ENGINE

Manufacturer.....Power Solutions Inc. (PSI)  
Model and Type.....Heavy Duty, 14.6LTCAC, 4 cycle  
Aspiration.....Turbocharged & Charge Air Cooled  
Cylinder Arrangement.....8 Cylinders, Vee  
Displacement Cu. In. (Liters).....892 (14.6)  
Bore & Stroke In. (Cm.).....5.04 x 5.59 (12.8 x 14.2)  
Compression Ratio.....10.5:1  
Main Bearings & Style.....10, Precision Half-Shell  
Cylinder Head.....Cast Iron  
Pistons.....Cast Aluminum  
Crankshaft.....Forged Steel  
Exhaust Valve.....Inconel, A193  
Governor.....Electronic  
Frequency Reg. (no load-full load).....Isochronous  
Frequency Reg. (steady state).....± 1/4%  
Air Cleaner.....Dry, Replaceable Cartridge  
Engine Speed.....1800  
Piston Speed, ft/min (m./min).....1677 (511)  
Max Power, bhp (kwm) Standby/LPG.....319 (238)  
Max Power, bhp (kwm) Standby/NG.....459 (342)  
Ltd. Warranty Period.....12 Months or 2000 hrs., first to occur

### FUEL SYSTEM

Type.....LPG or NAT. GAS, Vapor Withdrawal  
Fuel Pressure (kpa), in. H<sub>2</sub>O\*.....(1.74-2.74), 7"-11"  
Secondary Fuel Regulator.....NG or LPG Vapor System  
Auto Fuel Lock-Off Solenoid.....Standard on all sets  
Fuel Supply Inlet Line.....(2) 2" NPTF

### FUEL CONSUMPTION

| LP GAS: FT <sup>3</sup> /HR (M <sup>3</sup> /HR)                                                                                    | STANDBY    |
|-------------------------------------------------------------------------------------------------------------------------------------|------------|
| 100% LOAD                                                                                                                           | 926 (26.2) |
| 75% LOAD                                                                                                                            | 789 (22.4) |
| 50% LOAD                                                                                                                            | 532 (15.1) |
| LPG = 2500 BTU X FT <sup>3</sup> /HR = Total BTU/HR<br>LPG Conversion: 8.50 FT <sup>3</sup> = 1 LB. : 36.4 FT <sup>3</sup> = 1 GAL. |            |

| NAT. GAS: FT <sup>3</sup> /HR (M <sup>3</sup> /HR) | STANDBY     |
|----------------------------------------------------|-------------|
| 100% LOAD                                          | 2782 (78.7) |
| 75% LOAD                                           | 2168 (61.4) |
| 50% LOAD                                           | 1522 (43.1) |
| NG = 1000 BTU X FT <sup>3</sup> /HR = Total BTU/HR |             |

### OIL SYSTEM

Type.....Full Pressure  
Oil Pan Capacity qt. (L).....42.3 (40.0)  
Oil Pan Cap. W/ filter qt. (L).....49.7 (47.1)  
Oil Filter.....2, Replaceable Spin-On

### ELECTRICAL SYSTEM

Ignition System.....Electronic  
Eng. Alternator/Starter: 24 VDC, negative ground, 45 amp/hr.

Recommended battery to -18°C (0° F): ....(2) 12 VDC, BCI# 31,  
Max. Dimensions: 14"lg x 6 3/4" wi x 10" hi, with standard  
round posts. Min output 1000 CCA. Battery tray (max. dim. at  
15"lg x 7"wi). This model has (2) battery trays, (2) hold down  
straps, (2) sets of battery cables, and (1) battery charger.  
Installation of (2) 12VDC starting batteries connected in series  
for 24VDC output is required, with possible higher AMP/HR  
rating, as described above, if the normal environment  
temperature averages -13° F (-25°C) or cooler.



# APPLICATION AND ENGINEERING DATA FOR MODEL SP-2650-60 HZ

## COOLING SYSTEM

Type of System ..... Pressurized, closed recovery  
Coolant Pump ..... Pre-lubricated, self-sealing  
Cooling Fan Type (no. of blades) ..... Pusher (12)  
Fan Diameter inches (mm)..... 45" (1143)  
Ambient Capacity of Radiator °F (°C)..... 125 (51.6)  
Engine Jacket Coolant Capacity Gal (L)..... 9.5 (43.2)  
Radiator Coolant Capacity Gal. (L)..... 50.0 (227.3)  
Maximum Restriction of Cooling Air Intake  
and discharge side of radiator in. H<sub>2</sub>O (kpa)..... 0.5 (.125)  
Water Pump Capacity gpm (L/min)..... 180 (680)  
Heat Reject Coolant: Btu/min (kw) ..... 16,189 (284)  
Low Radiator Coolant Level Shutdown..... Standard  
Note: Coolant temp. shut-down switch setting at 230°F (110°C) with 50/50  
(water/antifreeze) mix.

## AIR REQUIREMENTS

Combustion Air, cfm (kg/hr) ..... 532 (1064)  
Radiator Air Flow cfm (m<sup>3</sup>/min)..... 30,000 (849)  
Heat Rejected to Ambient:  
Engine: kw (btu/min)..... 66.0 (3765)  
Alternator: kw (btu/min)..... 23 (1309)

## EXHAUST SYSTEM

Exhaust Outlet Size..... (2) 4"  
Max. Back Pressure, in. hg (KPA)..... 3.0 (10.2)  
Exhaust Flow, at rated kw: cfm (m<sup>3</sup>/min)..... 2521 (71.3)  
Exhaust Temp., at rated kw: °F (°C) ..... 1382 (750)  
Engines are EPA certified for Natural Gas.

## SOUND LEVELS MEASURED IN dB(A)

|                                  | Open<br>Set | Level 2<br>Encl. |
|----------------------------------|-------------|------------------|
| Level 2, Critical Silencer ..... | 93.....     | 80               |
| Level 3, Hospital Silencer ..... |             | 75               |

Note: Open sets (no enclosure) has (2) optional silencer system choices due to unknown job-site applications. Level 2 enclosure has installed critical silencer with upgrade to hospital silencer. Sound tests are averaged from several test points and taken at 23 ft. (7 m) from source of noise at normal operation.

## DERATE GENERATOR FOR ALTITUDE

3% per 1000 ft. (305m) above 3000 ft. (914m) from sea level

## DERATE GENERATOR FOR TEMPERATURE

2% per 10°F (5.6°C) above 104°F (40°C)

## DIMENSIONS AND WEIGHTS

|                              | Open<br>Set     | Level 2<br>Enclosure |
|------------------------------|-----------------|----------------------|
| Length in (cm).....          | 152 (368) ..... | 186 (473)            |
| Width in (cm).....           | 72 (183) .....  | 72 (183)             |
| Height in (cm).....          | 80 (203) .....  | 94 (239)             |
| 3 Ø Net Weight lbs (kg)..... | 8175 (3708) ... | 10675 (4842)         |
| 3 Ø Net Weight lbs (kg)..... | 8525 (3867) ... | 11025 (5001)         |

## DEEP SEA 7420 DIGITAL MICROPROCESSOR CONTROLLER



### Deep Sea 7420

The “7420” controller is an auto start mains (utility) failure module for single gen-set applications. This controller includes a backlit LCD display which continuously displays the status of the engine and generator at all times.

The “7420” controller will also monitor speed, frequency, voltage, current, oil pressure, coolant temp., and fuel levels. These modules have been designed to display warning and shut down status. It also includes: (11) configurable inputs • (8) configurable outputs • voltage monitoring • mains (utility) failure detection

• (250) event logs • configurable timers • automatic shutdown or warning during fault detection • remote start (on load) • engine preheat • advanced metering capability • hour meter • text LCD displays • protected solid state outputs • test buttons for: stop/reset • manual mode • auto mode • lamp test • start button • power monitoring (kWh, kVAh, kVArh) This controller includes expansion features including RS232, RS484 (using MODBUS-RTU/TCP), direct USB connection with PC, expansion optioned using DSENet for remote annunciation and remote relay interfacing for a distance of up to 3300FT. The controller software is freely downloadable from the internet and allows monitoring with direct USB cable, LAN, or by internet via the built in web interface.

**LOW LOAD CONDITIONS:** Operation of PSI HD engines at low-load conditions should be limited to no more than one (1) hour per twenty-four (24) hour period. If the application requires extended time at light loads, it is recommended that the engine load be increased to at least 70% of mechanical rating for a minimum of two (2) hours per fifty (50) hours of low-load operation. Piston sealing rings rely on adequate cylinder firing pressure and temperature to seal the combustion chamber and prevent excessive engine oil from entering the power cylinder. Under low loads these rings will not seal properly, resulting in oil being burned in the combustion chamber and carbon deposits on pistons and valves. This mechanism is well-documented in reciprocating engines of all fuel types and is often referred to as “wet-stacking.”



# STANDARD FEATURES FOR MODEL SP-2650-60 HZ

## STANDARD FEATURES

### CONTROL PANEL:

Deep Sea 7420 digital microprocessor with logic allows programming in the field. Controller has:

- STOP-MANUAL-AUTO modes and automatic engine shutdowns, signaled by full text LCD indicators:
- Low oil pressure
- High engine temp
- Low Radiator Level
- Three auxiliary alarms
- Battery fail alarm
- Engine fail to start
- Engine over speed
- Engine under speed
- Over & under voltage

Also included is tamper-proof engine hour meter

### ENGINE:

Full flow oil filter • Air filter • Oil pump • Solenoid type starter motor • Hi-temp radiator • Jacket water pump • Thermostat • Pusher fan and guard • Exhaust manifold • 24 VDC battery charging alternator • Flexible exhaust connector • "Isochronous" duty, electronic governor • Secondary dry fuel regulator • Dry fuel lock-off solenoid • Vibration isolators • Closed coolant recovery system with 50/50 water to anti-freeze mixture • flexible oil & radiator drain hose.

### AC GENERATOR SYSTEM:

AC generator • Shunt excited • Brushless design • Circuit Breaker installed and wired to gen-set • Direct connection to engine with flex disc • Class H, 180°C insulation • Self ventilated • Drip proof construction • UL Certified

### VOLTAGE REGULATOR:

½% Voltage regulation • EMI filter • Under-speed protection • Over-excitation protection • total encapsulation

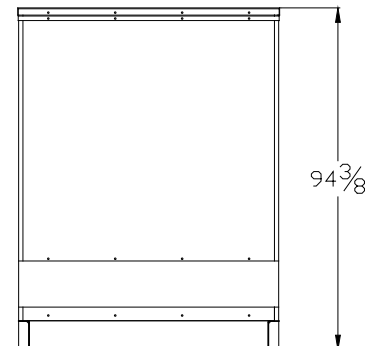
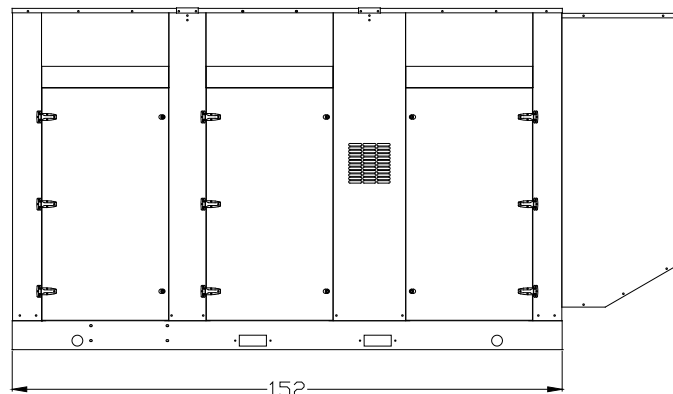
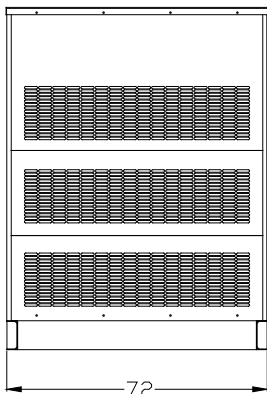
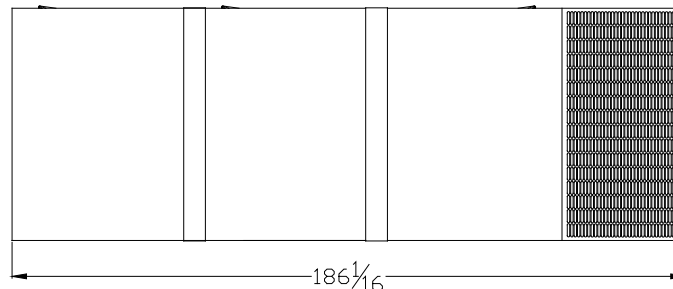
### DC ELECTRICAL SYSTEM:

Battery tray • Battery cables • Battery hold down straps • 2-stage battery float charger with maintaining & recharging automatic charge stages

### WEATHER/SOUND PROOF ALUMINUM HOUSING CORROSION RESISTANT PROTECTION CONSISTING OF:

- 9 Heated and Agitated Wash Stages
- Zinc Phosphate Etching-coating Stage
- Final Baked On Enamel Powder Coat
- 18/8 Stainless Steel Hardware

Design & specifications subject to change without prior notice. Dimensions shown are approximate. Contact Gillette for certified drawings. DO NOT USE DIMENSIONS FOR INSTALLATION PURPOSES.







# HEAVY-DUTY

## 14.6L ENGINE

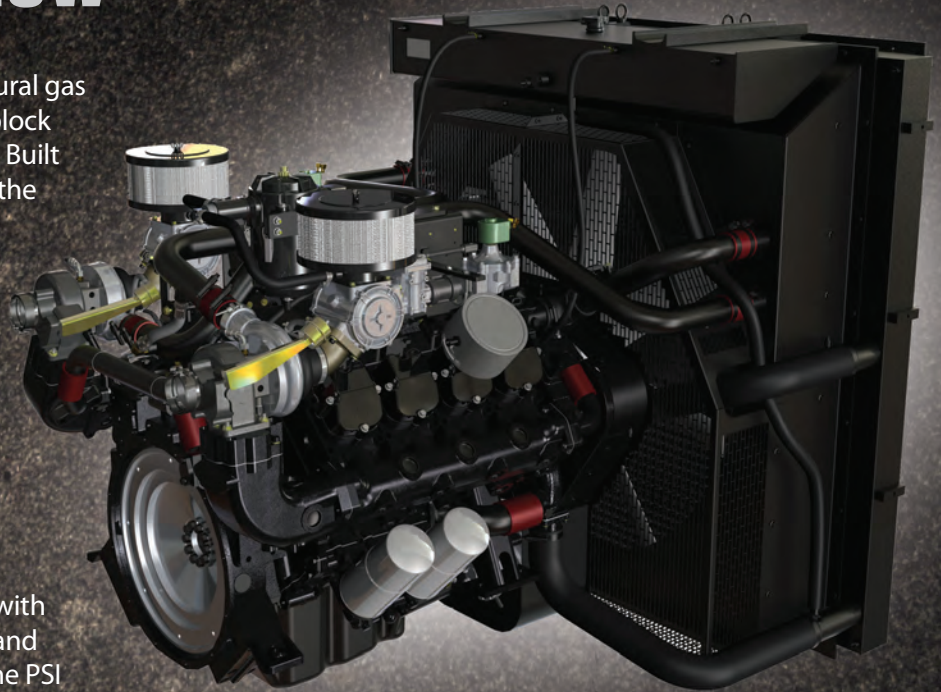
### INDUSTRIAL STATIONARY

## Product Overview

The PSI HD 14.6L is a U.S. EPA-certified natural gas and propane engine developed from the block up to be a reliable and durable power unit. Built upon a proven marine-diesel grade block, the 6-cylinder in-line, turbocharged and after-cooled engine features replaceable wet liners and water-cooled exhaust.

Superior engine performance is provided by an ECU that integrates and coordinates all critical functions including: Governor, Variable Ignition Timing, Air Fuel Ratio Control, Knock Suppression and Engine Protection.

The PSI HD product lineup has six models with displacements of 8.1L, 11.1L, 14.6L, 18.3L and 21.9L. These engines are an extension of the PSI product line, which is based upon blocks from 650cc to 8.8L. All PSI engines feature the same fuel systems and controls, simplifying your application development and support.



## FEATURES

- U.S. EPA-Certified and CARB-Compliant
- Dual Fuel with Automatic Change-Over
- 50C Ambient Cooling Capacity
- 3-Way Catalytic Converter
- Air Filtration
- UL2200-Compliant or Listed Components
- MasterTrak Telematics service (included for 1 year)

**MAXIMUM  
PERFORMANCE  
NO COMPROMISES**

**POWER & PERFORMANCE • EMISSION-CERTIFIED • FUEL-FLEXIBLE**



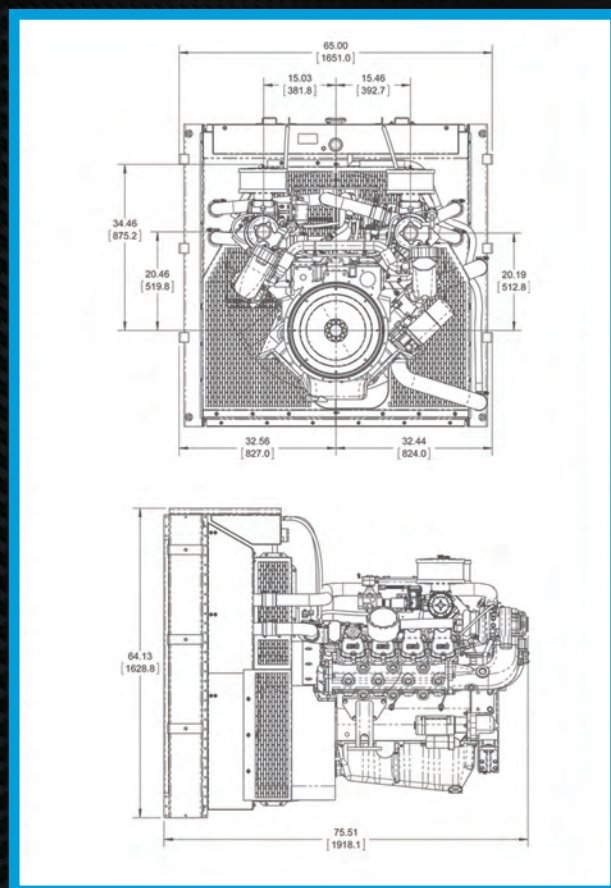


### 14.6 L Industrial Stationary Engine

|                    |                                   |                                |
|--------------------|-----------------------------------|--------------------------------|
| Displacement       | 892 cid                           | 14,620 cc                      |
| Compression Ratio  | 10.5:1                            |                                |
| Bore & Stroke      | 5.04 in<br>x 5.59 in              | 128 mm<br>x 142 mm             |
| kWe                | 300@1,800 rpm<br>(Natural Gas)    | 225@1,500 rpm<br>(Natural Gas) |
| Emission-Certified | EPA, CARB – Industrial Stationary |                                |
| Fuel Types         | Natural Gas / Propane             |                                |

#### GENERAL DATA

- Water-cooled, turbo-charged, air-to-air inter-cooled, stoichiometric, replaceable wet cylinder liners
- Cast iron block & heads, 10.5:1 compression ratio, overhead valve/2V configuration
- Crankshaft gear-driven oil system with cartridge-type filter, belt-driven centrifugal water pump
- Full ECU engine control including: coil-on-plug variable timing ignition, electronic governor and fuel-air ratio control
- Engine protection for oil pressure, coolant level, coolant temperature, fuel pressure, over-speed
- Complete fuel system for single fuel (NG/LP) operation with closed-loop control
- Alternator (45A/24VDC)
- Starter (24VDC)
- CANBUS J1939 interface



Power shown is gross engine power and has been corrected to SAE J1995. Actual installed power levels may vary depending on the application and OEM supplied components.

Information may vary with application. All specifications listed are based on the latest product information available at the time of publication. The right is reserved to make changes at any time without notice.

201 Mittel Drive, Wood Dale, IL 60191  
T: 630-350-9400 F: 630-350-9900  
[www.psiengines.com](http://www.psiengines.com)



## S4L1D-D41 Wdg.311 - Technical Data Sheet

### Standards

Stamford industrial alternators meet the requirements of the relevant parts of the BS EN 60034 and the relevant section of other international standards such as BS5000, VDE 0530, NEMA MG1-32, IEC34, CSA C22.2-100 and As1359. Other standards and certifications can be considered on request.

### Quality Assurance

Alternators are manufactured using production procedures having a quality assurance level to BS EN ISO 9001.



### Excitation and Voltage Regulators

| Excitation System  |              |       |        |  |                          |
|--------------------|--------------|-------|--------|--|--------------------------|
| AVR Type           | AS440        | MX341 | MX321  |  |                          |
| Voltage Regulation | ± 1%         | ± 1%  | ± 0.5% |  | with 4% Engine Governing |
| Excitation Type    | Self-Excited | PMG   | PMG    |  |                          |

|                                  |           |
|----------------------------------|-----------|
| No Load Excitation Voltage (V)   | 12 - 9    |
| No Load Excitation Current (A)   | 0.7 - 0.5 |
| Full Load Excitation Voltage (V) | 41 - 39   |
| Full Load Excitation Current (A) | 2.3 - 2.2 |
| Exciter Time Constant (seconds)  | 0.105     |



# STAMFORD

## S4L1D-D41 Wdg.311

| Electrical Data                                             |                                                                                         |      |      |      |             |      |      |      |
|-------------------------------------------------------------|-----------------------------------------------------------------------------------------|------|------|------|-------------|------|------|------|
| Insulation System                                           | Class H                                                                                 |      |      |      |             |      |      |      |
| Stator Winding                                              | Double Layer Lap                                                                        |      |      |      |             |      |      |      |
| Winding Pitch                                               | Two Thirds                                                                              |      |      |      |             |      |      |      |
| Winding Leads                                               | 12                                                                                      |      |      |      |             |      |      |      |
| Winding Number                                              | 311                                                                                     |      |      |      |             |      |      |      |
| Number of Poles                                             | 4                                                                                       |      |      |      |             |      |      |      |
| IP Rating                                                   | IP23                                                                                    |      |      |      |             |      |      |      |
| RFI Suppression                                             | BS EN 61000-6-2 & BS EN 61000-6-4, VDE 0875G, VDE 0875N.<br>Refer to factory for others |      |      |      |             |      |      |      |
| Waveform Distortion                                         | NO LOAD < 1.5% NON-DISTORTING BALANCED LINEAR LOAD < 5.0%                               |      |      |      |             |      |      |      |
| Short Circuit Ratio                                         | 1/Xd                                                                                    |      |      |      |             |      |      |      |
| Steady State X/R Ratio                                      | 12.29                                                                                   |      |      |      |             |      |      |      |
|                                                             | 50 Hz                                                                                   |      |      |      | 60 Hz       |      |      |      |
| Telephone Interference                                      | THF<2%                                                                                  |      |      |      | TIF<50      |      |      |      |
| Cooling Air                                                 | 0.83 m³/sec                                                                             |      |      |      | 0.99 m³/sec |      |      |      |
| Voltage Star                                                | 380                                                                                     | 400  | 415  | 440  | 416         | 440  | 460  | 480  |
| kVA Base Rating (Class H) for Reactance Values              | 300                                                                                     | 310  | 310  | 290  | 344         | 370  | 375  | 390  |
| Saturated Values in Per Unit at Base Ratings and Voltages   |                                                                                         |      |      |      |             |      |      |      |
| Xd Dir. Axis Synchronous                                    | 3.15                                                                                    | 2.94 | 2.73 | 2.27 | 3.60        | 3.46 | 3.21 | 3.07 |
| X'd Dir. Axis Transient                                     | 0.20                                                                                    | 0.19 | 0.17 | 0.14 | 0.22        | 0.21 | 0.20 | 0.19 |
| X''d Dir. Axis Subtransient                                 | 0.14                                                                                    | 0.13 | 0.12 | 0.10 | 0.15        | 0.14 | 0.13 | 0.12 |
| Xq Quad. Axis Reactance                                     | 2.66                                                                                    | 2.48 | 2.30 | 1.92 | 3.09        | 2.97 | 2.75 | 2.63 |
| X''q Quad. Axis Subtransient                                | 0.40                                                                                    | 0.37 | 0.34 | 0.29 | 0.40        | 0.39 | 0.36 | 0.34 |
| XL Stator Leakage Reactance                                 | 0.07                                                                                    | 0.06 | 0.06 | 0.05 | 0.09        | 0.08 | 0.08 | 0.07 |
| X2 Negative Sequence Reactance                              | 0.27                                                                                    | 0.25 | 0.23 | 0.19 | 0.28        | 0.27 | 0.25 | 0.24 |
| X0 Zero Sequence Reactance                                  | 0.10                                                                                    | 0.09 | 0.09 | 0.07 | 0.10        | 0.09 | 0.09 | 0.08 |
| Unsaturated Values in Per Unit at Base Ratings and Voltages |                                                                                         |      |      |      |             |      |      |      |
| Xd Dir. Axis Synchronous                                    | 3.78                                                                                    | 3.53 | 3.28 | 2.73 | 4.32        | 4.16 | 3.85 | 3.68 |
| X'd Dir. Axis Transient                                     | 0.23                                                                                    | 0.21 | 0.20 | 0.17 | 0.25        | 0.24 | 0.23 | 0.22 |
| X''d Dir. Axis Subtransient                                 | 0.17                                                                                    | 0.16 | 0.15 | 0.12 | 0.17        | 0.16 | 0.15 | 0.15 |
| Xq Quad. Axis Reactance                                     | 2.74                                                                                    | 2.55 | 2.37 | 1.97 | 3.18        | 3.06 | 2.84 | 2.71 |
| X''q Quad. Axis Subtransient                                | 0.48                                                                                    | 0.45 | 0.41 | 0.34 | 0.48        | 0.46 | 0.43 | 0.41 |
| XL Stator Leakage Reactance                                 | 0.08                                                                                    | 0.07 | 0.07 | 0.05 | 0.10        | 0.09 | 0.09 | 0.08 |
| Xlr Rotor Leakage Reactance                                 | 0.12                                                                                    | 0.11 | 0.10 | 0.09 | 0.14        | 0.13 | 0.12 | 0.12 |
| X2 Negative Sequence Reactance                              | 0.32                                                                                    | 0.30 | 0.28 | 0.23 | 0.34        | 0.32 | 0.30 | 0.29 |
| X0 Zero Sequence Reactance                                  | 0.12                                                                                    | 0.11 | 0.10 | 0.08 | 0.11        | 0.11 | 0.10 | 0.10 |



# STAMFORD®

## S4L1D-D41 Wdg.311

| Time Constants (Seconds)                                       |                                                                                                                                                                                 |            |
|----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| T'd TRANSIENT TIME CONST.                                      | 0.08                                                                                                                                                                            |            |
| T''d SUB-TRANSTIME CONST.                                      | 0.019                                                                                                                                                                           |            |
| T'do O.C. FIELD TIME CONST.                                    | 1.7                                                                                                                                                                             |            |
| Ta ARMATURE TIME CONST.                                        | 0.018                                                                                                                                                                           |            |
| T''q SUB-TRANSTIME CONST.                                      | 0.0077                                                                                                                                                                          |            |
| Resistances in Ohms (Ω) at 22 <sup>o</sup> C                   |                                                                                                                                                                                 |            |
| Stator Winding Resistance (Ra), per phase for series connected | 0.0124                                                                                                                                                                          |            |
| Rotor Winding Resistance (Rf)                                  | 1.05                                                                                                                                                                            |            |
| Exciter Stator Winding Resistance                              | 18                                                                                                                                                                              |            |
| Exciter Rotor Winding Resistance per phase                     | 0.068                                                                                                                                                                           |            |
| PMG Phase Resistance (Rpmg) per phase                          | 1.9                                                                                                                                                                             |            |
| Positive Sequence Resistance (R1)                              | 0.0155                                                                                                                                                                          |            |
| Negative Sequence Resistance (R2)                              | 0.017856                                                                                                                                                                        |            |
| Zero Sequence Resistance (R0)                                  | 0.0155                                                                                                                                                                          |            |
| Saturation Factors                                             | 400V                                                                                                                                                                            | 480V       |
| SG1.0                                                          | 0.31                                                                                                                                                                            | 0.31       |
| SG1.2                                                          | 1.25                                                                                                                                                                            | 1.25       |
| Mechanical Data                                                |                                                                                                                                                                                 |            |
| Shaft and Keys                                                 | All alternator rotors are dynamically balanced to better than BS6861: Part 1 Grade 2.5 for minimum vibration in operation. Two bearing generators are balanced with a half key. |            |
|                                                                | 1 Bearing                                                                                                                                                                       | 2 Bearings |
| SAE Adaptor                                                    | SAE 0.5, 1                                                                                                                                                                      | N/A        |
| Moment of Inertia                                              | 4.0771 kgm2                                                                                                                                                                     | N/A        |
| Weight Wound Stator                                            | 415 kg                                                                                                                                                                          | N/A        |
| Weight Wound Rotor                                             | 361 kg                                                                                                                                                                          | N/A        |
| Weight Complete Alternator                                     | 940 kg                                                                                                                                                                          | N/A        |
| Shipping weight in a Crate                                     | 1010 kg                                                                                                                                                                         | N/A        |
| Packing Crate Size                                             | 155 x 87 x 107(cm)                                                                                                                                                              | N/A        |
| Maximum Over Speed                                             | 2250 RPM for two minutes                                                                                                                                                        |            |
| Bearing Drive End                                              | N/A                                                                                                                                                                             | N/A        |
| Bearing Non-Drive End                                          | Ball 6314                                                                                                                                                                       | N/A        |



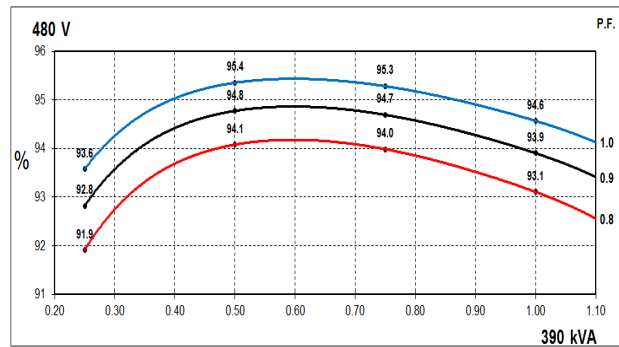
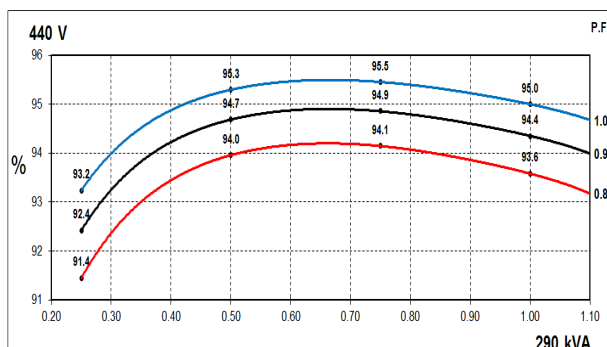
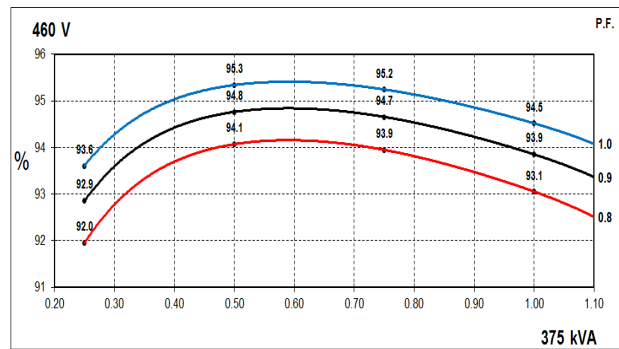
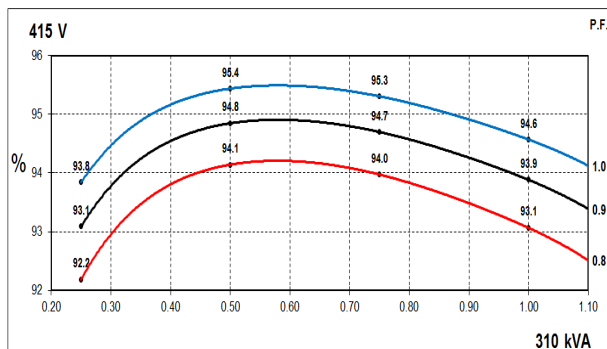
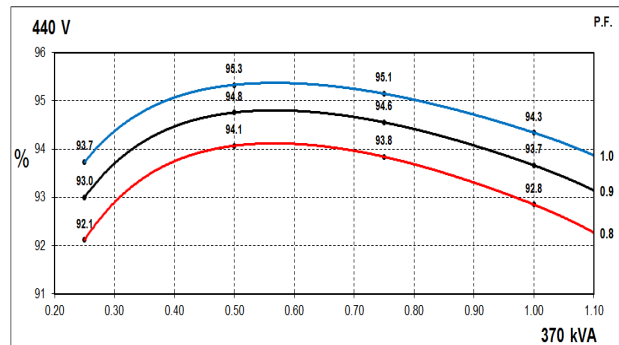
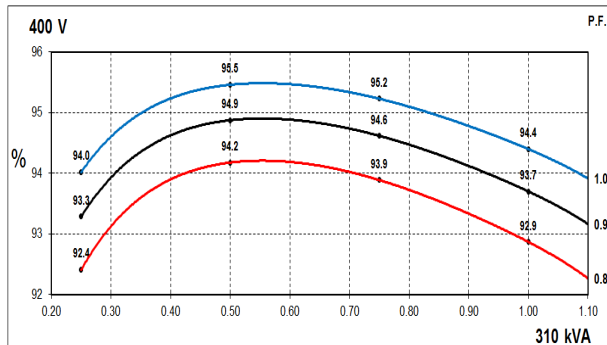
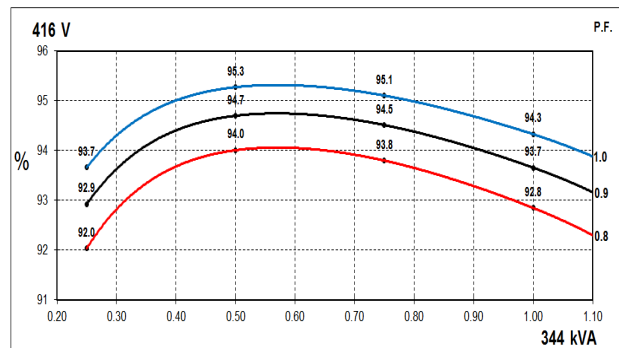
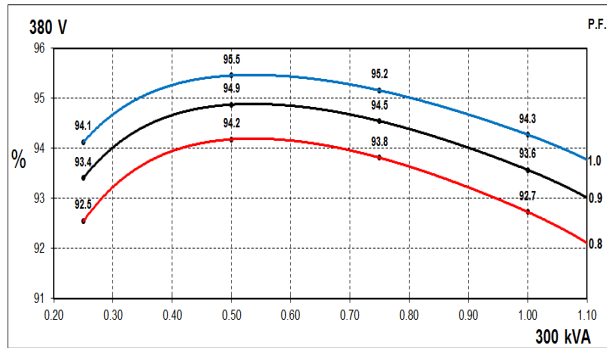
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## S4L1D-D41 Wdg.311

### THREE PHASE EFFICIENCY CURVES

50Hz

60Hz



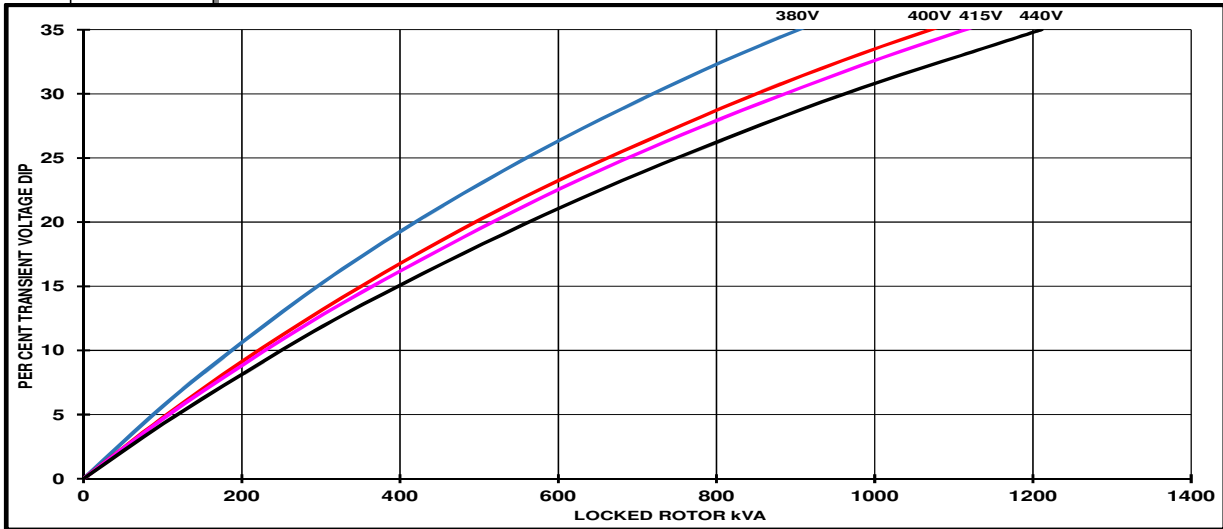


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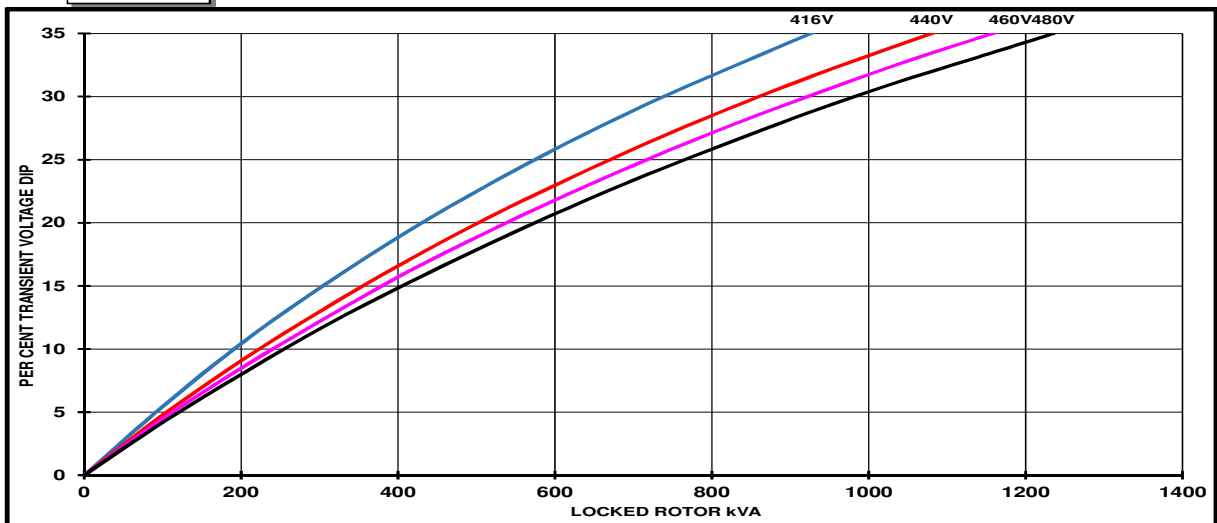
S4L1D-D41 Wdg.311

## Locked Rotor Motor Starting Curves - Separately Excited

50Hz



60Hz



| Transient Voltage Dip Scaling Factor |        | Transient Voltage Rise Scaling Factor         |
|--------------------------------------|--------|-----------------------------------------------|
| PF                                   | Factor | For voltage rise multiply voltage dip by 1.25 |
| < 0.5                                | 1      |                                               |
| 0.5                                  | 0.97   |                                               |
| 0.6                                  | 0.93   |                                               |
| 0.7                                  | 0.9    |                                               |
| 0.8                                  | 0.85   |                                               |
| 0.9                                  | 0.83   |                                               |

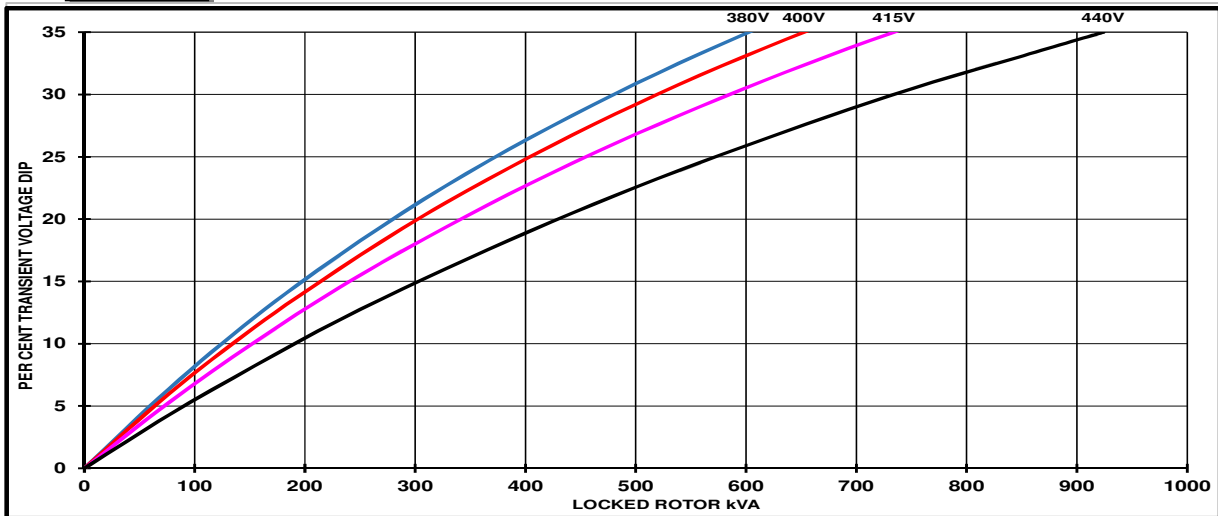


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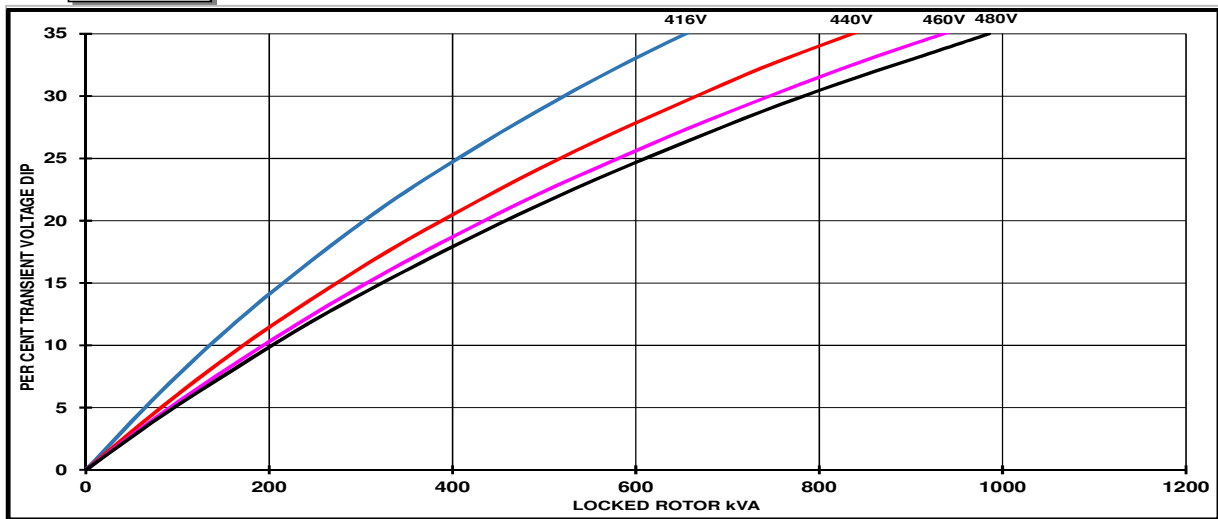
S4L1D-D41 Wdg.311

## Locked Rotor Motor Starting Curves - Self Excited

**50Hz**



**60Hz**



| Transient Voltage Dip Scaling Factor |        | Transient Voltage Rise Scaling Factor         |
|--------------------------------------|--------|-----------------------------------------------|
| PF                                   | Factor | For voltage rise multiply voltage dip by 1.25 |
| < 0.5                                | 1      |                                               |
| 0.5                                  | 0.97   |                                               |
| 0.6                                  | 0.93   |                                               |
| 0.7                                  | 0.9    |                                               |
| 0.8                                  | 0.85   |                                               |
| 0.9                                  | 0.83   |                                               |

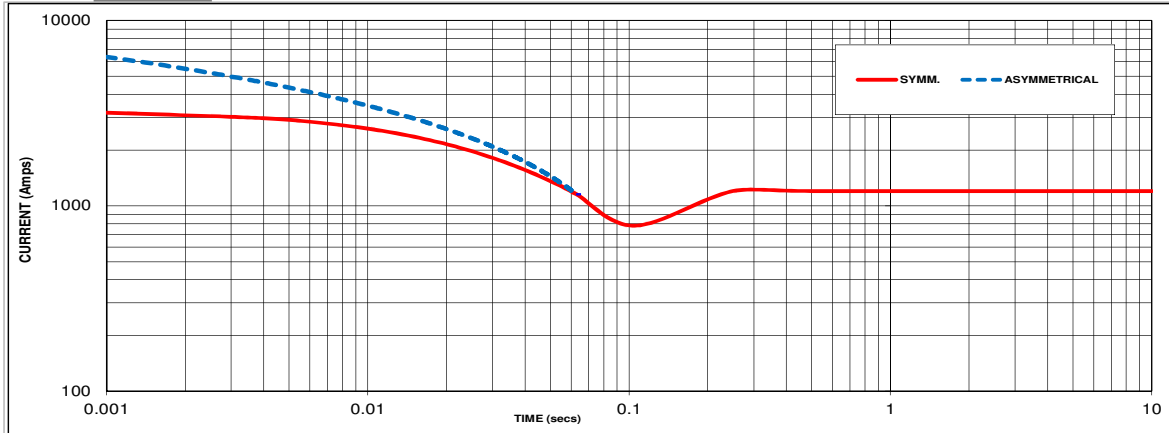


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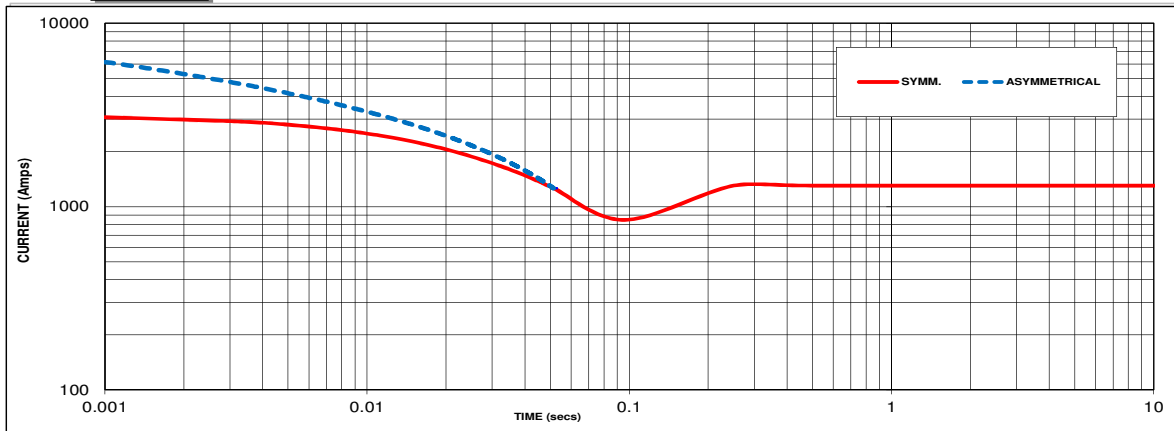
## Three-phase Short Circuit Decrement Curve

**50Hz**



Sustained Short Circuit = 1200 Amps

**60Hz**



Sustained Short Circuit = 1300 Amps

### Note 1

The following multiplication factors should be used to adjust the values from curve between time 0.001 seconds and the minimum current point in respect of nominal operating voltage :

| 50Hz    |        | 60Hz    |        |
|---------|--------|---------|--------|
| Voltage | Factor | Voltage | Factor |
| 380V    | X 1.00 | 416V    | X 1.00 |
| 400V    | X 1.05 | 440V    | X 1.06 |
| 415V    | X 1.09 | 460V    | X 1.10 |
| 440V    | X 1.16 | 480V    | X 1.15 |

The sustained current value is constant irrespective of voltage level

### Note 2

The following multiplication factor should be used to convert the values calculated in accordance with NOTE 1 to those applicable to the various types of short circuit :

|                         | 3-phase | 2-phase L-L | 1-phase L-N |
|-------------------------|---------|-------------|-------------|
| Instantaneous           | x 1.00  | x 0.87      | x 1.30      |
| Minimum                 | x 1.00  | x 1.80      | x 3.20      |
| Sustained               | x 1.00  | x 1.50      | x 2.50      |
| Max. sustained duration | 10 sec. | 5 sec.      | 2 sec.      |

All other times are unchanged

### Note 3

Curves are drawn for Star connected machines under no-load excitation at rated speeds. For other connection the following multipliers should be applied to current values as shown :  
 Parallel Star = Curve current value X 2  
 Series Delta = Curve current value X 1.732

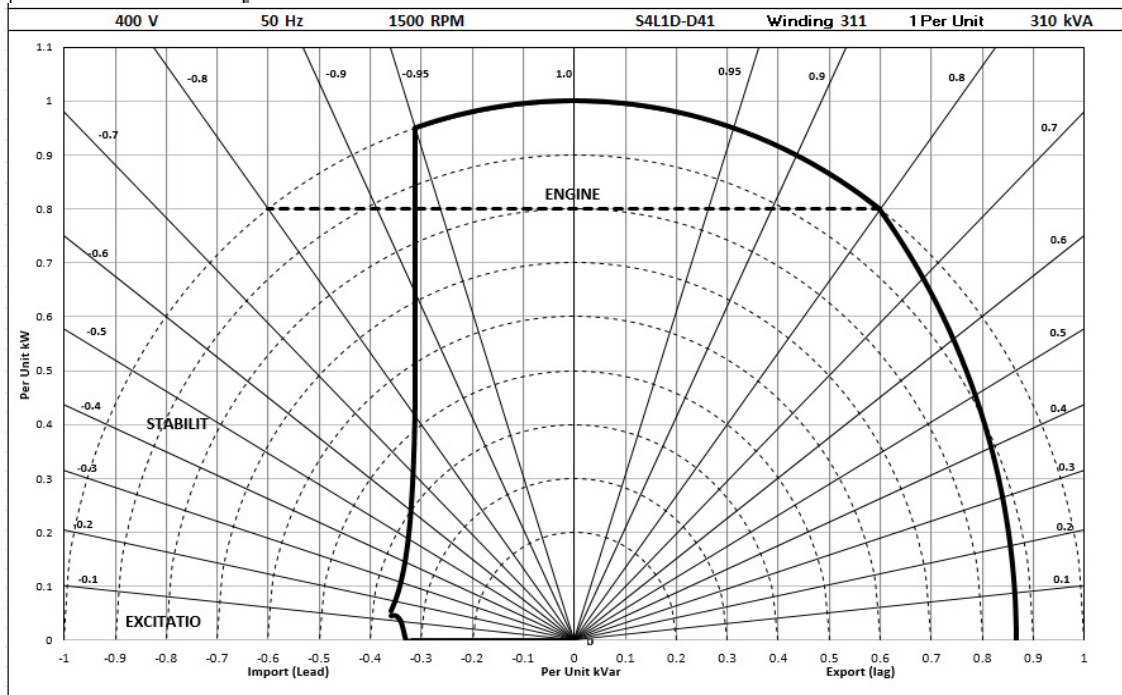


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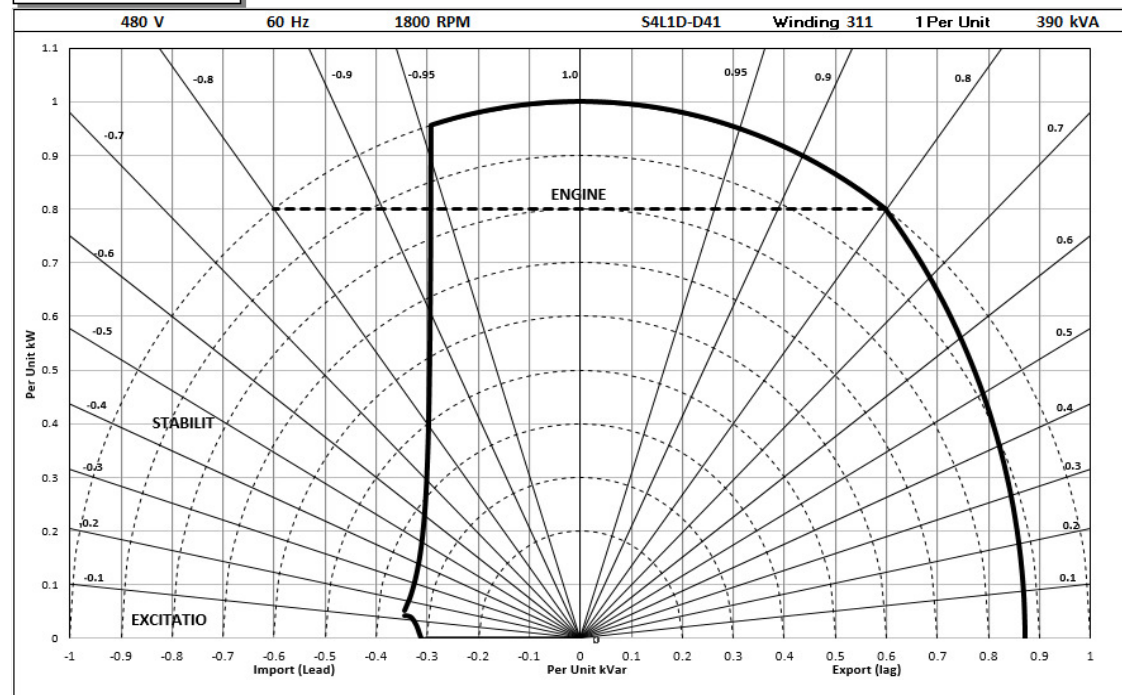
S4L1D-D41 Wdg.311

## Typical Alternator Operating Charts

**400V/50Hz**



**480V/60Hz**





# STAMFORD®

## S4L1D-D41 Wdg.311

### RATINGS AT 0.8 POWER FACTOR

| Class - Temp Rise |                 | Standby - 163/27°C |      |      |      | Standby - 150/40°C |      |      |      | Cont. H - 125/40°C |      |      |      | Cont. F - 105/40°C |      |      |      |
|-------------------|-----------------|--------------------|------|------|------|--------------------|------|------|------|--------------------|------|------|------|--------------------|------|------|------|
| <b>50</b><br>Hz   | Series Star (V) | 380                | 400  | 415  | 440  | 380                | 400  | 415  | 440  | 380                | 400  | 415  | 440  | 380                | 400  | 415  | 440  |
|                   | kVA             | 330                | 340  | 340  | 320  | 320                | 330  | 330  | 310  | 300                | 310  | 310  | 290  | 280                | 285  | 285  | 270  |
|                   | kW              | 264                | 272  | 272  | 256  | 256                | 264  | 264  | 248  | 240                | 248  | 248  | 232  | 224                | 228  | 228  | 216  |
|                   | Efficiency (%)  | 92.1               | 92.3 | 92.6 | 93.2 | 92.3               | 92.5 | 92.7 | 93.3 | 92.7               | 92.9 | 93.1 | 93.6 | 93.1               | 93.3 | 93.4 | 93.8 |
|                   | kW Input        | 287                | 295  | 294  | 275  | 277                | 285  | 285  | 266  | 259                | 267  | 266  | 248  | 241                | 244  | 244  | 230  |

|                 |                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| <b>60</b><br>Hz | Series Star (V) | 416  | 440  | 460  | 480  | 416  | 440  | 460  | 480  | 416  | 440  | 460  | 480  | 416  | 440  | 460  | 480  |
|                 | kVA             | 375  | 410  | 415  | 430  | 365  | 400  | 400  | 415  | 344  | 370  | 375  | 390  | 315  | 340  | 345  | 355  |
|                 | kW              | 300  | 328  | 332  | 344  | 292  | 320  | 320  | 332  | 275  | 296  | 300  | 312  | 252  | 272  | 276  | 284  |
|                 | Efficiency (%)  | 92.4 | 92.2 | 92.5 | 92.6 | 92.5 | 92.4 | 92.7 | 92.8 | 92.8 | 92.9 | 93.1 | 93.1 | 93.2 | 93.2 | 93.4 | 93.5 |
|                 | kW Input        | 325  | 356  | 359  | 372  | 316  | 346  | 345  | 358  | 296  | 319  | 322  | 335  | 270  | 292  | 295  | 304  |

#### De-Rates

All values tabulated above are subject to the following reductions:

- 5% when air inlet filters are fitted
- 3% for every 500 meters by which the operating altitude exceeds 1000 meters above mean sea level
- 3% for every 5°C by which the operational ambient temperature exceeds 40°C
- For any other operating conditions impacting the cooling circuit please refer to applications

Note: Requirement for operating in an ambient exceeding 60°C and altitude exceeding 4000 meters must be referred to applications.

#### Dimensional and Torsional Drawing

For dimensional and torsional information please refer to the alternator General Arrangement and rotor drawings available on our website (<http://stamford-avk.com/>)

**Note:** Continuous development of our products means that the information contained in our data sheets can change without notice, and specifications should always be confirmed with Cummins Generator Technologies prior to purchase.





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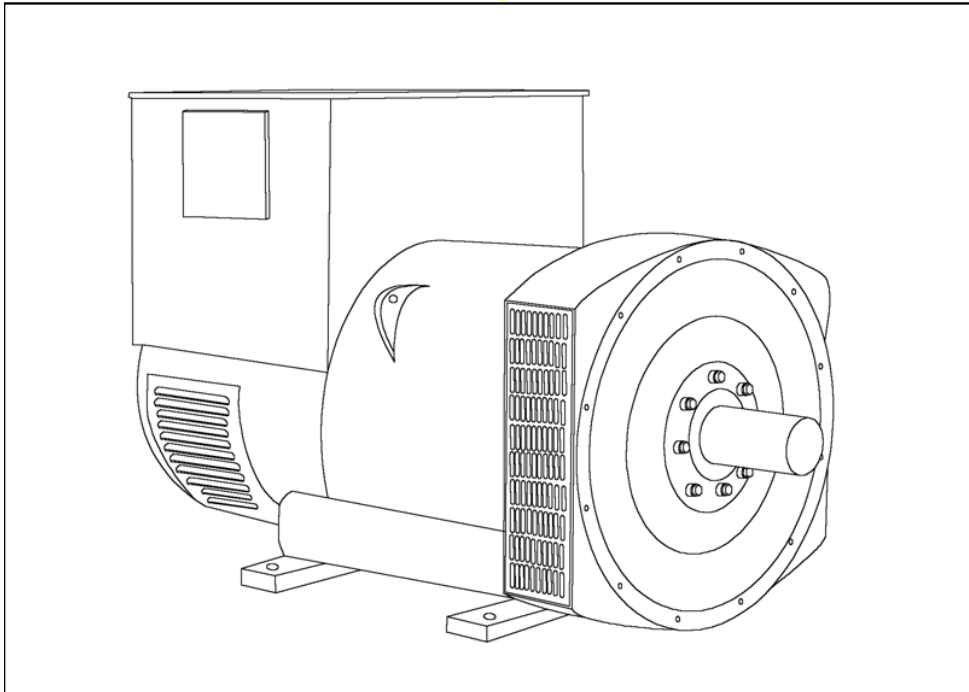




# STAMFORD<sup>®</sup>

**HCI434D/444D - Winding 17**

Technical  Data Sheet





# HCI434D/444D

## SPECIFICATIONS & OPTIONS

**STAMFORD**

### STANDARDS

Stamford industrial generators meet the requirements of BS EN 60034 and the relevant section of other international standards such as BS5000, VDE 0530, NEMA MG1-32, IEC34, CSA C22.2-100, AS1359. Other standards and certifications can be considered on request.

### VOLTAGE REGULATORS

#### AS440 AVR - STANDARD

With this self-excited system the main stator provides power via the Automatic Voltage Regulator (AVR) to the exciter stator. The high efficiency semi-conductors of the AVR ensure positive build-up from initial low levels of residual voltage.

The exciter rotor output is fed to the main rotor through a three-phase full-wave bridge rectifier. The rectifier is protected by a surge suppressor against surges caused, for example, by short circuit or out-of-phase paralleling. The AS440 will support a range of electronic accessories, including a 'droop' Current Transformer (CT) to permit parallel operation with other ac generators.

#### MX341 AVR

This sophisticated AVR is incorporated into the Stamford Permanent Magnet Generator (PMG) control system.

The PMG provides power via the AVR to the main exciter, giving a source of constant excitation power independent of generator output. The main exciter output is then fed to the main rotor, through a full wave bridge, protected by a surge suppressor. The AVR has in-built protection against sustained over-excitation, caused by internal or external faults. This de-excites the machine after a minimum of 5 seconds.

An engine relief load acceptance feature can enable full load to be applied to the generator in a single step.

If three-phase sensing is required with the PMG system the MX321 AVR must be used.

We recommend three-phase sensing for applications with greatly unbalanced or highly non-linear loads.

#### MX321 AVR

The most sophisticated of all our AVRs combines all the features of the MX341 with, additionally, three-phase rms sensing, for improved regulation and performance. Over voltage protection is built-in and short circuit current level adjustments is an optional facility.

### WINDINGS & ELECTRICAL PERFORMANCE

All generator stators are wound to 2/3 pitch. This eliminates triplen (3rd, 9th, 15th ...) harmonics on the voltage waveform and is found to be the optimum design for trouble-free supply of non-linear loads. The 2/3 pitch design avoids excessive neutral currents sometimes seen with higher winding pitches, when in parallel with the mains. A fully connected damper winding reduces oscillations during paralleling. This winding, with the 2/3 pitch and carefully selected pole and tooth designs, ensures very low waveform distortion.

### TERMINALS & TERMINAL BOX

Standard generators are 3-phase reconnectable with 12 ends brought out to the terminals, which are mounted on a cover at the non-drive end of the generator. A sheet steel terminal box contains the AVR and provides ample space for the customers' wiring and gland arrangements. It has removable panels for easy access.

### SHAFT & KEYS

All generator rotors are dynamically balanced to better than BS6861:Part 1 Grade 2.5 for minimum vibration in operation. Two bearing generators are balanced with a half key.

### INSULATION/IMPREGNATION

The insulation system is class 'H'.

All wound components are impregnated with materials and processes designed specifically to provide the high build required for static windings and the high mechanical strength required for rotating components.

### QUALITY ASSURANCE

Generators are manufactured using production procedures having a quality assurance level to BS EN ISO 9001.

The stated voltage regulation may not be maintained in the presence of certain radio transmitted signals. Any change in performance will fall within the limits of Criteria 'B' of EN 61000-6-2:2001. At no time will the steady-state voltage regulation exceed 2%.

### DE RATES

All values tabulated on page 6 are subject to the following reductions

5% when air inlet filters are fitted.

3% for every 500 metres by which the operating altitude exceeds 1000 metres above mean sea level.

3% for every 5 C by which the operational ambient temperature exceeds 40 C.

Note: Requirement for operating in an ambient exceeding 60 C must be referred to the factory.

*NB Continuous development of our products entitles us to change specification details without notice, therefore they must not be regarded as binding.*

*Front cover drawing typical of product range.*



# HCI434D/444D

**STAMFORD**

## WINDING 17

|                         |                                                  |         |                          |
|-------------------------|--------------------------------------------------|---------|--------------------------|
| CONTROL SYSTEM          | SEPARATELY EXCITED BY P.M.G.                     |         |                          |
| A.V.R.                  | MX321                                            | MX341   |                          |
| VOLTAGE REGULATION      | ± 0.5 %                                          | ± 1.0 % | With 4% ENGINE GOVERNING |
| SUSTAINED SHORT CIRCUIT | REFER TO SHORT CIRCUIT DECREMENT CURVES (page 5) |         |                          |

|                         |                                  |                          |  |
|-------------------------|----------------------------------|--------------------------|--|
| CONTROL SYSTEM          | SELF EXCITED                     |                          |  |
| A.V.R.                  | AS440                            |                          |  |
| VOLTAGE REGULATION      | ± 1.0 %                          | With 4% ENGINE GOVERNING |  |
| SUSTAINED SHORT CIRCUIT | WILL NOT SUSTAIN A SHORT CIRCUIT |                          |  |

|                                                     |                                                                                      |                    |
|-----------------------------------------------------|--------------------------------------------------------------------------------------|--------------------|
| INSULATION SYSTEM                                   | CLASS H                                                                              |                    |
| PROTECTION                                          | IP23                                                                                 |                    |
| RATED POWER FACTOR                                  | 0.8                                                                                  |                    |
| STATOR WINDING                                      | DOUBLE LAYER LAP                                                                     |                    |
| WINDING PITCH                                       | TWO THIRDS                                                                           |                    |
| WINDING LEADS                                       | 12                                                                                   |                    |
| STATOR WDG. RESISTANCE                              | 0.02 Ohms PER PHASE AT 22°C SERIES STAR CONNECTED                                    |                    |
| ROTOR WDG. RESISTANCE                               | 1.05 Ohms at 22°C                                                                    |                    |
| EXCITER STATOR RESISTANCE                           | 18 Ohms at 22°C                                                                      |                    |
| EXCITER ROTOR RESISTANCE                            | 0.068 Ohms PER PHASE AT 22°C                                                         |                    |
| R.F.I. SUPPRESSION                                  | BS EN 61000-6-2 & BS EN 61000-6-4, VDE 0875G, VDE 0875N. refer to factory for others |                    |
| WAVEFORM DISTORTION                                 | NO LOAD < 1.5% NON-DISTORTING BALANCED LINEAR LOAD < 5.0%                            |                    |
| MAXIMUM OVERSPEED                                   | 2250 Rev/Min                                                                         |                    |
| BEARING DRIVE END                                   | BALL. 6317 (ISO)                                                                     |                    |
| BEARING NON-DRIVE END                               | BALL. 6314 (ISO)                                                                     |                    |
|                                                     | 1 BEARING                                                                            | 2 BEARING          |
| WEIGHT COMP. GENERATOR                              | 940 kg                                                                               | 950 kg             |
| WEIGHT WOUND STATOR                                 | 415 kg                                                                               | 415 kg             |
| WEIGHT WOUND ROTOR                                  | 361 kg                                                                               | 338 kg             |
| WR² INERTIA                                         | 4.0771 kgm²                                                                          | 3.8783 kgm²        |
| SHIPPING WEIGHTS in a crate                         | 1010 kg                                                                              | 1010 kg            |
| PACKING CRATE SIZE                                  | 155 x 87 x 107(cm)                                                                   | 155 x 87 x 107(cm) |
| TELEPHONE INTERFERENCE                              | THF <2%                                                                              | TIF <50            |
| COOLING AIR                                         | 0.99 m³/sec 2100 cfm                                                                 |                    |
| VOLTAGE SERIES STAR                                 | 600V                                                                                 |                    |
| VOLTAGE PARALLEL STAR                               | 300V                                                                                 |                    |
| VOLTAGE SERIES DELTA                                | 346V                                                                                 |                    |
| kVA BASE RATING FOR REACTANCE VALUES                | 375                                                                                  |                    |
| Xd DIR. AXIS SYNCHRONOUS                            | 2.96                                                                                 |                    |
| X'd DIR. AXIS TRANSIENT                             | 0.18                                                                                 |                    |
| X''d DIR. AXIS SUBTRANSIENT                         | 0.13                                                                                 |                    |
| Xq QUAD. AXIS REACTANCE                             | 2.54                                                                                 |                    |
| X''q QUAD. AXIS SUBTRANSIENT                        | 0.34                                                                                 |                    |
| Xl LEAKAGE REACTANCE                                | 0.07                                                                                 |                    |
| X2 NEGATIVE SEQUENCE                                | 0.22                                                                                 |                    |
| Xo ZERO SEQUENCE                                    | 0.08                                                                                 |                    |
| REACTANCES ARE SATURATED                            |                                                                                      |                    |
| VALUES ARE PER UNIT AT RATING AND VOLTAGE INDICATED |                                                                                      |                    |
| T'd TRANSIENT TIME CONST.                           | 0.08s                                                                                |                    |
| T''d SUB-TRANSTIME CONST.                           | 0.019s                                                                               |                    |
| T'do O.C. FIELD TIME CONST.                         | 1.7s                                                                                 |                    |
| Ta ARMATURE TIME CONST.                             | 0.018s                                                                               |                    |
| SHORT CIRCUIT RATIO                                 | 1/Xd                                                                                 |                    |



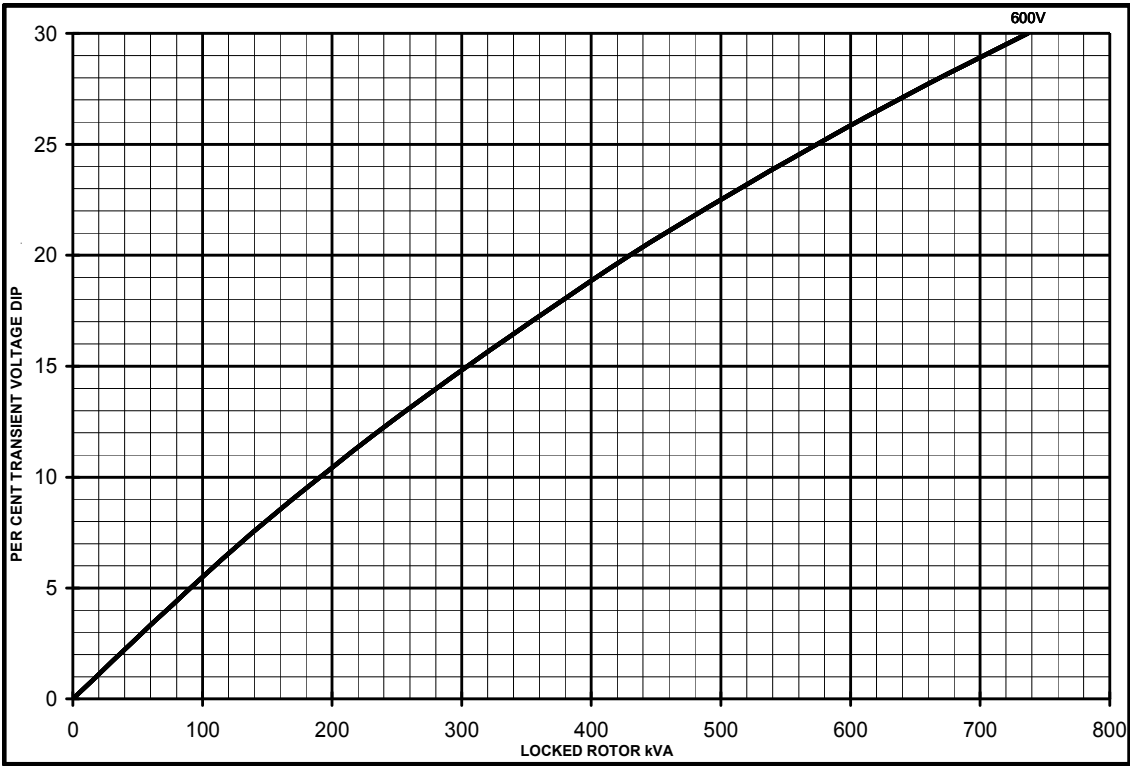
HCI434D/444D

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Winding 17

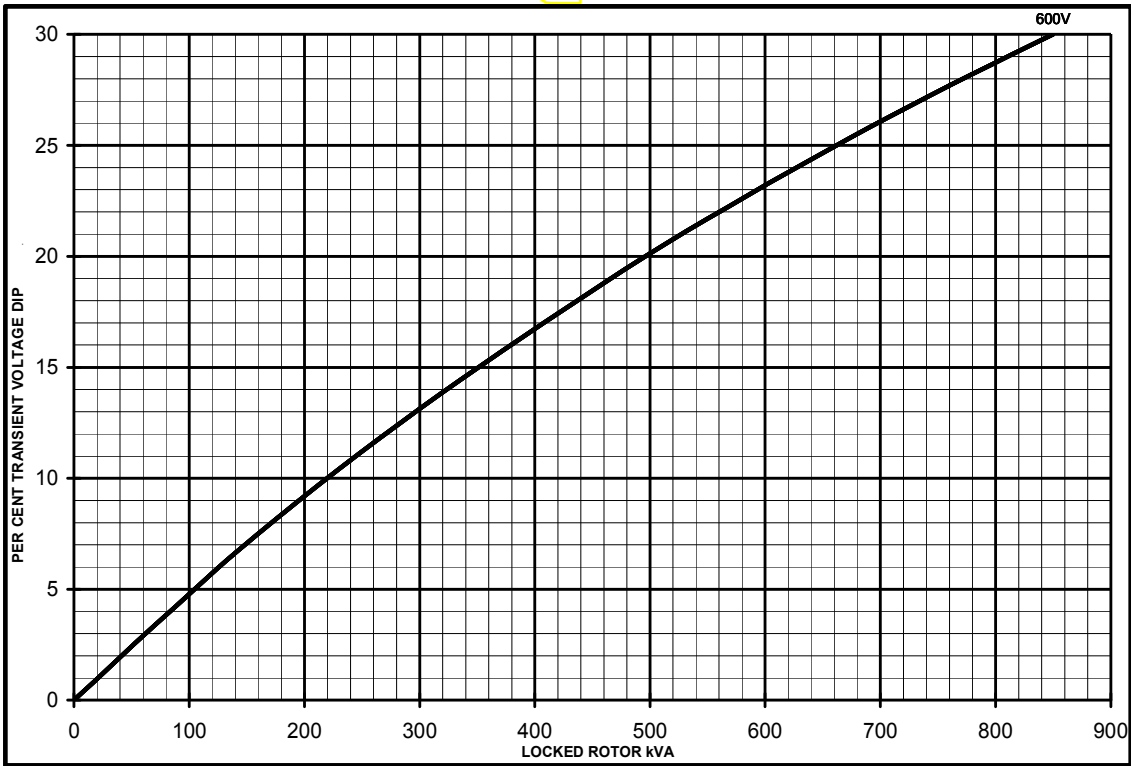
SX

Locked Rotor Motor Starting Curves



OCU

MX

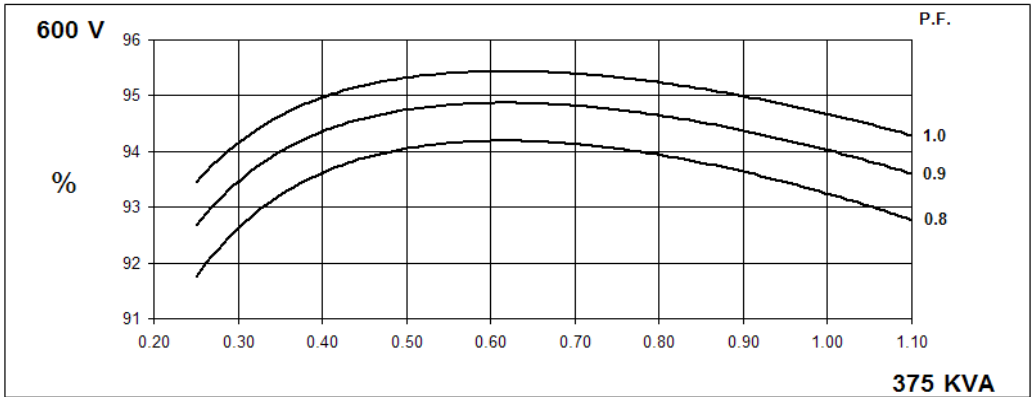




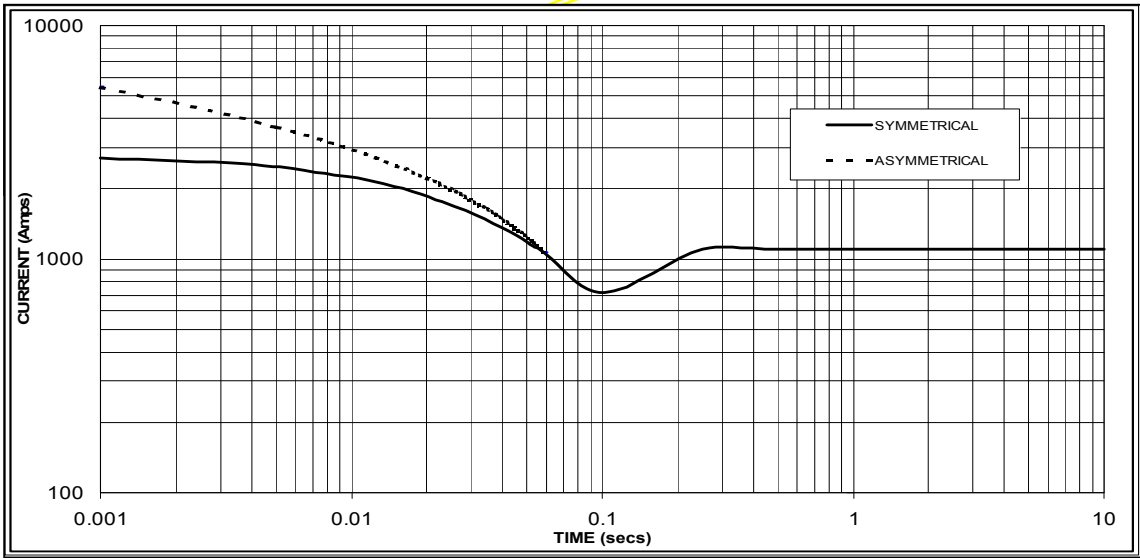
**HCI434D/444D**  
Winding 17

**STAMFORD**

**THREE PHASE EFFICIENCY CURVES**



**Three-phase Short Circuit Decrement Curve. No-load Excitation at Rated Speed  
Based on star (wye) connection.**



Sustained Short Circuit = 1100 Amps

**Note**

The following multiplication factor should be used to convert the values from curve for the various types of short circuit :

|                         | 3-phase | 2-phase L-L | 1-phase L-N |
|-------------------------|---------|-------------|-------------|
| Instantaneous           | x 1.00  | x 0.87      | x 1.30      |
| Minimum                 | x 1.00  | x 1.80      | x 3.20      |
| Sustained               | x 1.00  | x 1.50      | x 2.50      |
| Max. sustained duration | 10 sec. | 5 sec.      | 2 sec.      |

All other times are unchanged



**HCI434D/444D**

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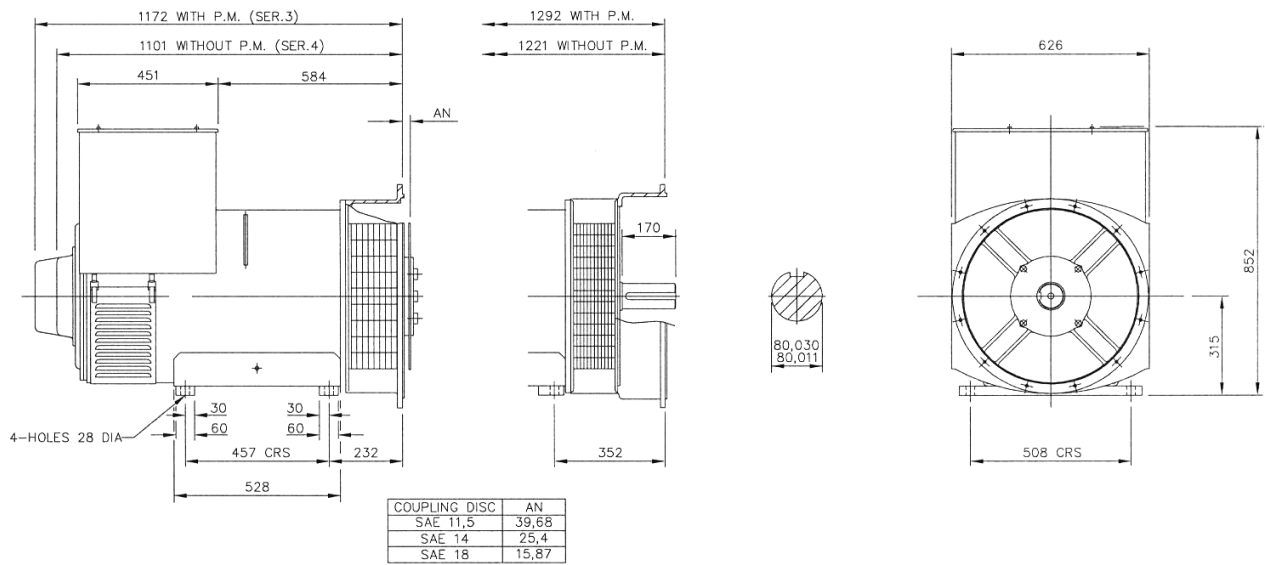
**Winding 17 / 0.8 Power Factor**

**60Hz**

**RATINGS**

| Class - Temp Rise | Cont. F - 105/40°C | Cont. H - 125/40°C | Standby - 150/40°C | Standby - 163/27°C |
|-------------------|--------------------|--------------------|--------------------|--------------------|
| Series Star (V)   | 600                | 600                | 600                | 600                |
| Parallel Star (V) | 300                | 300                | 300                | 300                |
| Series Delta (V)  | 346                | 346                | 346                | 346                |
| kVA               | 345                | 375                | 400                | 415                |
| kW                | 276                | 300                | 320                | 332                |
| Efficiency (%)    | 93.6               | 93.2               | 92.9               | 92.7               |
| kW Input          | 295                | 322                | 344                | 358                |

**APPROVED**  
**DIMENSIONS**





APPROVED DOCUMENT

**STAMFORD**

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# DSE7410/20

## AUTO START & AUTO MAINS FAILURE MODULES

### FEATURES

The DSE7410 is an Auto Start Control Module and the **DSE7420** is an Auto Mains (Utility) Failure Control Module suitable for a wide variety of single, diesel or gas, gen-set applications.

A sophisticated module monitoring an extensive number of engine parameters, the DSE74xx will announce warnings, shutdown and engine status information on the back-lit LCD screen, illuminated LED, remote PC, audible alarm and via SMS text alerts. The module includes RS232, RS485 & Ethernet ports as well as dedicated terminals for system expansion.

The DSE7400 Series modules are compatible with electronic (CAN) and non-electronic (magnetic pick-up/alternator sensing) engines and offer a comprehensive number of flexible inputs, outputs and extensive engine protections so the system can be easily adapted to meet the most demanding industry paralleling requirements.

The modules can be easily configured using the DSE Configuration Suite Software. Selected front panel editing is also available.

### ENVIRONMENTAL TESTING STANDARDS

#### ELECTRO-MAGNETIC COMPATIBILITY

BS EN 61000-6-2  
EMC Generic Immunity Standard for the Industrial Environment  
BS EN 61000-6-4  
EMC Generic Emission Standard for the Industrial Environment

#### ELECTRICAL SAFETY

BS EN 60950  
Safety of Information Technology Equipment, including Electrical Business Equipment

#### TEMPERATURE

BS EN 60068-2-1  
Ab/Ae Cold Test -30 °C  
BS EN 60068-2-2  
Bb/Be Dry Heat +70 °C

#### VIBRATION

BS EN 60068-2-6  
Ten sweeps in each of three major axes  
5 Hz to 8 Hz @ +/-7.5 mm,  
8 Hz to 500 Hz @ 2 gn

#### HUMIDITY

BS EN 60068-2-30  
Db Damp Heat Cyclic 20/55 °C @ 95% RH 48 Hours  
BS EN 60068-2-78  
Cab Damp Heat Static 40 °C @ 93% RH 48 Hours

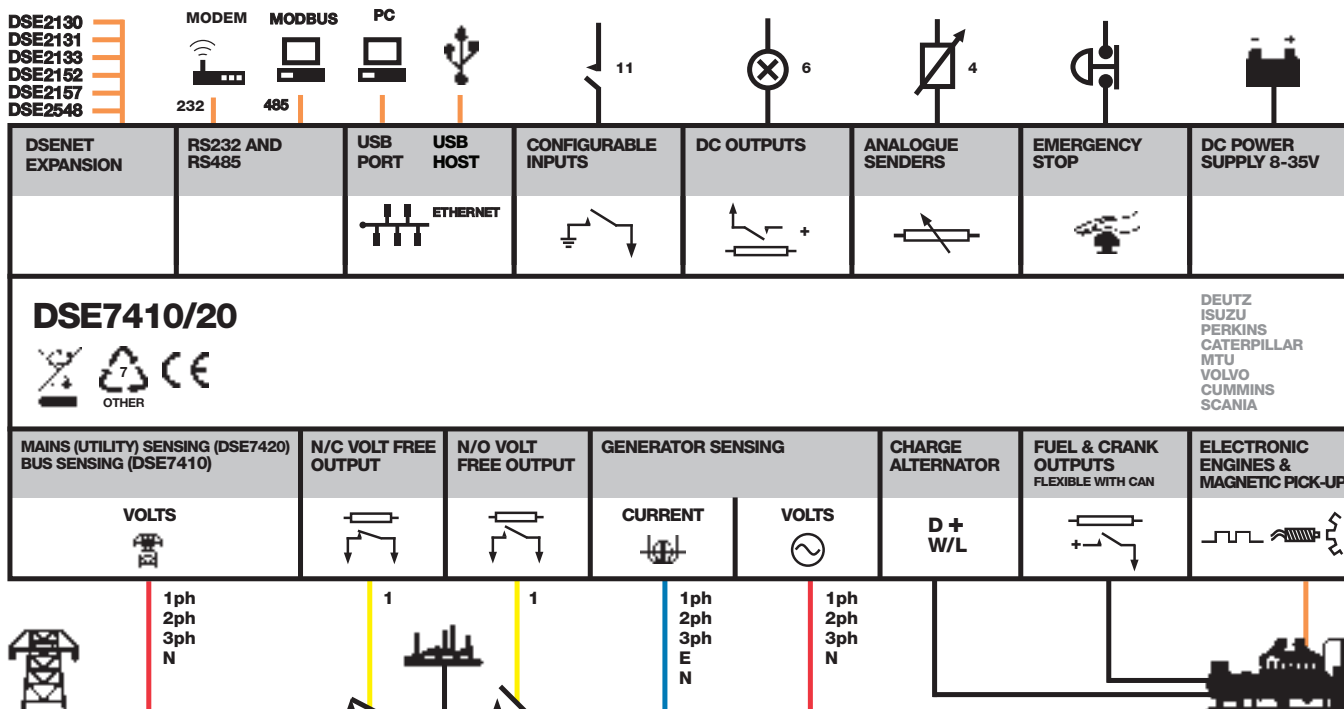
#### SHOCK

BS EN 60068-2-27  
Three shocks in each of three major axes  
15 gn in 11 ms

#### DEGREES OF PROTECTION PROVIDED BY ENCLOSURES

BS EN 60529  
IP65 - Front of module when installed into the control panel with the supplied sealing gasket.

### COMPREHENSIVE FEATURE LIST TO SUIT A WIDE VARIETY OF GEN-SET APPLICATIONS





# DSE7410/20

## AUTO START & AUTO MAINS FAILURE MODULES

### FEATURES



### DSE7420

DSE7410



### KEY FEATURES

- Configurable inputs (11)
- Configurable outputs (8)
- Voltage measurement
- Mains (utility) failure detection
- Dedicated load test button
- kW overload alarms
- Comprehensive electrical protection
- RS232, RS485 & Ethernet remote communications
- Modbus RTU/TCP
- PLC functionality
- Multi event exercise timer
- Back-lit LCD 4-line text display
- Multiple display languages
- Automatic start/Manual start
- Audible alarm
- Fixed and flexible LED indicators
- Event log (250)
- Engine protection
- Fault condition notification to a designated PC
- Front panel mounting
- Protected front panel programming
- Configurable alarms and timers
- Configurable start and stop timers

- Five key menu navigation
- Front panel editing with PIN protection
- 3 configurable maintenance alarms
- CAN and magnetic pick-up/Alt. sensing
- Fuel usage monitor and low fuel alarms
- Charge alternator failure alarm
- Manual speed control (on compatible CAN engines)
- Manual fuel pump control
- "Protections disabled" feature
- Reverse power protection
- Power monitoring (kW h, kV Ar, kV A h, kV Ar h)
- Load switching (load shedding and dummy load outputs)
- Automatic load transfer (DSE7420)
- Unbalanced load protection
- Independent earth fault trip
- Fully configurable via DSE Configuration Suite PC software
- Configurable display languages
- Remote SCADA monitoring via DSE Configuration Suite PC software

- Advanced SMS messaging (additional external modem required)
- Start & stop capability via SMS messaging
- Additional display screens to help with modem diagnostics
- DSENet® expansion
- Integral PLC editor

### KEY BENEFITS

- RS232, RS485 & Ethernet can be used at the same time
- DSENet® connection for system expansion
- PLC functionality
- Five step dummy load support
- Five step load shedding support
- High number of inputs and outputs
- Worldwide language support
- Direct USB connection to PC
- Ethernet monitoring
- USB host
- Data logging & trending

### RELATED MATERIALS

#### TITLE

DSE7410 Installation Instructions  
**DSE7420** Installation Instructions  
 DSE74xx Quick Start Guide  
 DSE74xx Operator Manual  
 DSE74xx PC Configuration Suite Manual

#### PART NO'S

053-085  
 053-088  
 057-162  
 057-161  
 057-160

### SPECIFICATION

#### DC SUPPLY

**CONTINUOUS VOLTAGE RATING**  
 8 V to 35 V Continuous

#### CRANKING DROPOUTS

Able to survive 0 V for 50 mS, providing supply was at least 10 V before dropout and supply recovers to 5 V. This is achieved without the need for internal batteries

#### MAXIMUM OPERATING CURRENT

260 mA at 12 V, 130 mA at 24 V

#### MAXIMUM STANDBY CURRENT

120 mA at 12 V, 65 mA at 24 V

#### CHARGE FAIL/EXCITATION RANGE

0 V to 35 V

#### OUTPUTS

##### OUTPUT A (FUEL)

15 A DC at supply voltage

##### OUTPUT B (START)

15 A DC at supply voltage

##### OUTPUTS C & D

8 A AC at 250 V AC (Volt free)

##### AUXILIARY OUTPUTS E, F, G, H, I & J

2 A DC at supply voltage

#### GENERATOR

##### VOLTAGE RANGE

15 V to 333 V AC (L-N)

##### FREQUENCY RANGE

3.5 Hz to 75 Hz

##### MAINS (UTILITY) (DSE7420)

##### VOLTAGE RANGE

15 V to 333 V AC (L-N)

##### FREQUENCY RANGE

3.5 Hz to 75 Hz

##### BUS (DSE7410)

##### VOLTAGE RANGE

15 V to 333 V AC (L-N)

##### FREQUENCY RANGE

3.5 Hz to 75 Hz

##### MAGNETIC PICK UP

##### VOLTAGE RANGE

+/- 0.5 V to 70 V

##### FREQUENCY RANGE

10,000 Hz (max)

#### DIMENSIONS

##### OVERALL

240 mm x 172 mm x 57 mm  
 9.4" x 6.8" x 2.2"

##### PANEL CUTOUT

220 mm x 160 mm  
 8.7" x 6.3"

##### MAXIMUM PANEL THICKNESS

8 mm  
 0.3"

##### STORAGE TEMPERATURE RANGE

-40 °C to +85 °C

### DEEP SEA ELECTRONICS PLC UK

Highfield House, Hunmanby Industrial Estate, Hunmanby YO14 0PH  
**TELEPHONE** +44 (0) 1723 890099 **FACSIMILE** +44 (0) 1723 893303  
**EMAIL** sales@deepseapl.com **WEBSITE** www.deepseapl.com

### DEEP SEA ELECTRONICS INC USA

3230 Williams Avenue, Rockford, IL 61101-2668 USA  
**TELEPHONE** +1 (815) 316 8706 **FACSIMILE** +1 (815) 316 8708  
**EMAIL** sales@deepseausa.com **WEBSITE** www.deepseausa.com



**Molded Case Circuit Breakers**  
**Power Defense™ UL Global Series**  
**Part Number: PDG33G0400B2NJNNNNNN**



Datasheet creation date: 02/12/2019

**PRODUCT VIEW** *(Use Mouse to Rotate and Zoom)*

Eaton's Power Defense™ molded case circuit breakers, a globally rated platform designed to help keep your power system safe with latest protection technology. Engineered for the future: IoT and Industry 4.0 features such as built-in communications, advanced energy metering, and algorithms that signal breaker maintenance; zone selective interlock technology that clears faults quickly and locally; ArcFlash reduction options that help protect your people, and not to mention Eaton's best-in-class support and service.

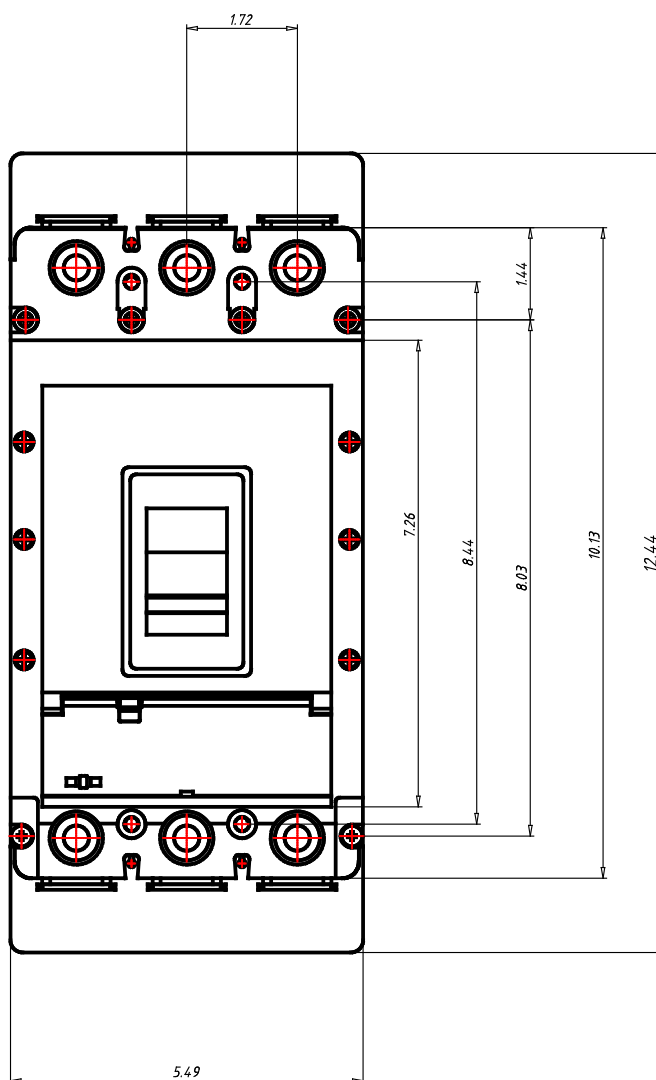
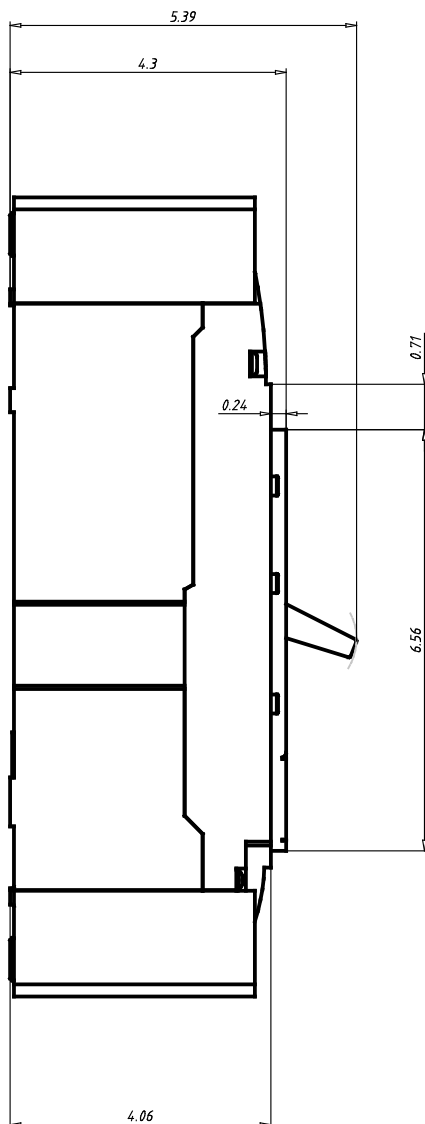
**Tech Data for Configured Product**

|                                             |                              |
|---------------------------------------------|------------------------------|
| Power Defense Catalog Number                | PDG33G0400B2NJNNNNNN         |
| Frame Size                                  | Frame 3                      |
| Poles                                       | 3 Pole                       |
| Voltage                                     | 480V AC                      |
| Interruption or Breaking Capacity (Icu/Ics) | 35kA                         |
| Continuous Current Rating (In)              | 400A                         |
| Trip Unit Type                              | PXR10                        |
| Trip Unit Options 1                         | LSI                          |
| Trip Unit Options 2                         | None                         |
| Indicating Accessories                      | None                         |
| Indicating Accessories Terminal             | None                         |
| Tripping Accessories                        | None                         |
| Tripping Accessory Terminal                 | None                         |
| Tripping Accessory Voltage                  | None                         |
| Line Type Description                       | Option 1 - Standard Terminal |
| Line Conductor Options                      | (2) 3/0 - 250                |
| Line Terminal Type                          | Aluminum                     |
| Load Type Description                       | Option 1 - Standard Terminal |
| Load Conductor Options                      | (2) 3/0 - 250                |
| Load Terminal Type                          | Aluminum                     |
| Special Options - Type of Modification      | None                         |
| Details                                     | None                         |
| Additional Description                      | None                         |



**Molded Case Circuit Breakers**  
**Power Defense™ UL Global Series**  
**Part Number: PDG33G0400B2NJNNNNNN**

**Technical drawings**





**Molded Case Circuit Breakers**  
**Power Defense™ UL Global Series**  
**Part Number: PDG33G0400B2NJNNNNNN**

**General Technical Data**

|                                                                   |                                   |
|-------------------------------------------------------------------|-----------------------------------|
| Frame Rating (In)                                                 | 400A                              |
| Reference Standard                                                | UL489, CSA 22.2, IEC 60947-2 & GB |
| Number of poles                                                   | 3                                 |
| Neutral rating                                                    | -                                 |
| Interruption Rating Designator                                    | F / G / K / M / N / P             |
| UL Interruption Rating to UL 489 (240Vac)                         | 35 / 65 / 85 / 100 / 150 / 200kA  |
| UL Interruption Rating to UL 489 (480Vac)                         | 25 / 35 / 50 / 65(a) / 85 / 100kA |
| UL Interruption Rating to UL 489 (600Vac)                         | 14 / 18 / 25 / 35 / 50 / 65kA     |
| UL Interruption Rating to UL 489 (125/250Vdc)                     |                                   |
| UL Current Limiting                                               | N / N / N / Y / Y / Y             |
| Rated breaking capacity to IEC 60947-2 (220-240 Vac Icu)          | 35 / 55 / 85 / 100 / 150 / 200kA  |
| Rated breaking capacity to IEC 60947-2 (220-240 Vac Ics)          | 35 / 55 / 85 / 100 / 100 / 150kA  |
| Rated breaking capacity to IEC 60947-2 (380-415 Vac Icu)          | 25 / 36 / 50 / 70 / 70 / 100kA    |
| Rated breaking capacity to IEC 60947-2 (380-415 Vac Ics)          | 25 / 36 / 50 / 53 / 70 / 70kA     |
| Rated breaking capacity to IEC 60947-2 (440 Vac Icu)              | 25 / 30 / 35 / 50 / 70 / 100kA    |
| Rated breaking capacity to IEC 60947-2 (440 Vac Ics)              | 20 / 22.5 / 35 / 40 / 50 / 50kA   |
| Rated breaking capacity to IEC 60947-2 (525 Vac Icu)              | 18 / 20 / 25 / 30 / 35 / 40kA     |
| Rated breaking capacity to IEC 60947-2 (525 Vac Ics)              | 5 / 7.5 / 10 / 15 / 25 / 25kA     |
| Rated breaking capacity to IEC 60947-2 (690 Vac Icu)              | - / 8 / 10 / 15 / 20 / 20kA       |
| Rated breaking capacity to IEC 60947-2 (690 Vac Ics)              | - / 4 / 5 / 7.5 / 10 / 10kA       |
| Rated breaking capacity to IEC 60947-2 (125V DC Icu)              |                                   |
| Rated breaking capacity to IEC 60947-2 (250V DC 2P in series Ics) | 10 / 10 / 10 / 22 / 22 / 22kA     |
| Frequency                                                         | 50/60Hz                           |
| Trip Unit Type                                                    | PXR10                             |
| Continuous Current Range                                          | 160 - 400A                        |
| 100% UL489 Rated                                                  | Yes                               |
| Instantaneous/Short Circuit Range                                 | 2 - 10 In                         |
| Magnetic/Instantaneous Override                                   | 4400A                             |
| Dimensions H x W x D (inches)                                     | 10.125 x 5.47 x 4.297             |
| Pole to pole distance inches                                      | 1.719                             |
| Approx Weight lbs                                                 | 16                                |
| RoHS Compliance                                                   | Yes                               |
| UL File Number                                                    | E7819                             |
| Ambient Temp Calibration                                          |                                   |
| Derating at 50C                                                   |                                   |
| Derating at 60C                                                   |                                   |
| Derating at 70C                                                   |                                   |

1. 480Vac corresponds to 277Vac for 1P
2. 600Vac corresponds to 347Vac for 1P



**Molded Case Circuit Breakers**  
**Power Defense™ UL Global Series**  
**Part Number: PDG43G0800B2NJNNNNNN**



Datasheet creation date: 20/11/2019

**PRODUCT VIEW** *(Use Mouse to Rotate and Zoom)*

Eaton's Power Defense™ molded case circuit breakers, a globally rated platform designed to help keep your power system safe with latest protection technology. Engineered for the future: IoT and Industry 4.0 features such as built-in communications, advanced energy metering, and algorithms that signal breaker maintenance; zone selective interlock technology that clears faults quickly and locally; ArcFlash reduction options that help protect your people, and not to mention Eaton's best-in-class support and service.

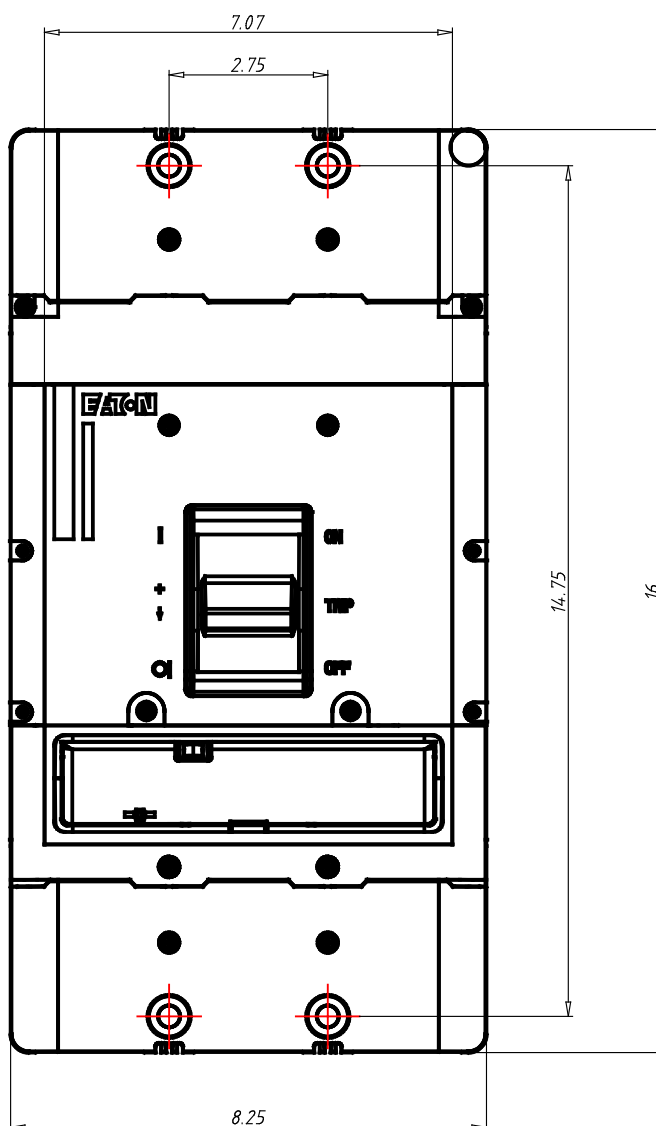
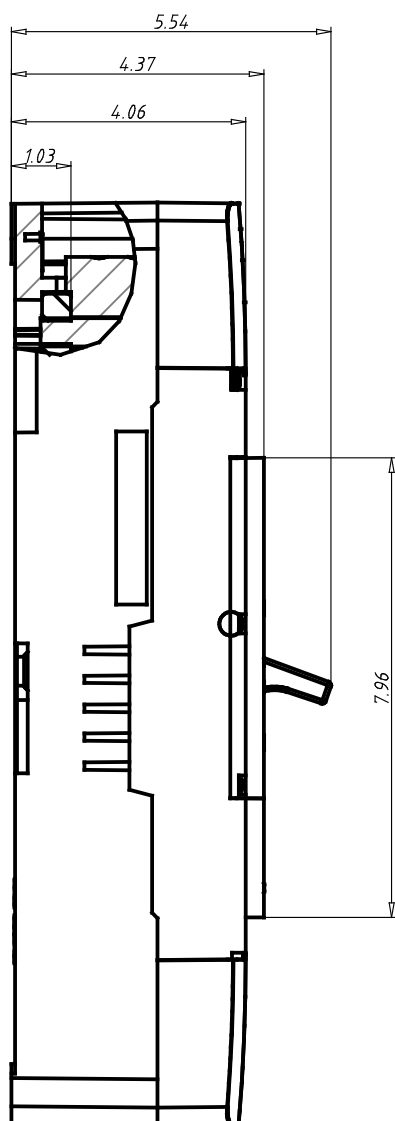
**Tech Data for Configured Product**

|                                             |                              |
|---------------------------------------------|------------------------------|
| Power Defense Catalog Number                | PDG43G0800B2NJNNNNNN         |
| Frame Size                                  | Frame 4                      |
| Poles                                       | 3 Pole                       |
| Voltage                                     | 240V AC                      |
| Interruption or Breaking Capacity (Icu/Ics) | 55kA                         |
| Continuous Current Rating (In)              | 800A                         |
| Trip Unit Type                              | PXR10                        |
| Trip Unit Options 1                         | LSI                          |
| Trip Unit Options 2                         | None                         |
| Indicating Accessories                      | None                         |
| Indicating Accessories Terminal             | None                         |
| Tripping Accessories                        | None                         |
| Tripping Accessory Terminal                 | None                         |
| Tripping Accessory Voltage                  | None                         |
| Line Type Description                       | Option 1 - Standard Terminal |
| Line Conductor Options                      | (3) 3/0 - 400                |
| Line Terminal Type                          | Aluminum                     |
| Load Type Description                       | Option 1 - Standard Terminal |
| Load Conductor Options                      | (3) 3/0 - 400                |
| Load Terminal Type                          | Aluminum                     |
| Special Options - Type of Modification      | None                         |
| Details                                     | None                         |
| Additional Description                      | None                         |



**Molded Case Circuit Breakers**  
**Power Defense™ UL Global Series**  
**Part Number: PDG43G0800B2NJNNNNNN**

**Technical drawings**





**Molded Case Circuit Breakers**  
**Power Defense™ UL Global Series**  
**Part Number: PDG43G0800B2NJNNNNNN**

**General Technical Data**

|                                                                   |                                   |
|-------------------------------------------------------------------|-----------------------------------|
| Frame Rating (In)                                                 | 800A                              |
| Reference Standard                                                | UL489, CSA 22.2, IEC 60947-2 & GB |
| Number of poles                                                   | 3                                 |
| Neutral rating                                                    | -                                 |
| Interruption Rating Designator                                    | G / K / M                         |
| UL Interruption Rating to UL 489 (240Vac)                         | 65 / 85 / 100kA                   |
| UL Interruption Rating to UL 489 (480Vac)                         | 35 / 50 / 65(a)kA                 |
| UL Interruption Rating to UL 489 (600Vac)                         | 18 / 25 / 35kA                    |
| UL Interruption Rating to UL 489 (125/250Vdc)                     |                                   |
| UL Current Limiting                                               | -                                 |
| Rated breaking capacity to IEC 60947-2 (220-240 Vac Icu)          | 55 / 85 / 100 / 100kA             |
| Rated breaking capacity to IEC 60947-2 (220-240 Vac Ics)          | 55 / 85 / 100 / 100kA             |
| Rated breaking capacity to IEC 60947-2 (380-415 Vac Icu)          | 36 / 50 / 70 / 70kA               |
| Rated breaking capacity to IEC 60947-2 (380-415 Vac Ics)          | 36 / 50 / 53 / 70kA               |
| Rated breaking capacity to IEC 60947-2 (440 Vac Icu)              | 30 / 35 / 50 / 65kA               |
| Rated breaking capacity to IEC 60947-2 (440 Vac Ics)              | 22.5 / 35 / 40 / 50kA             |
| Rated breaking capacity to IEC 60947-2 (525 Vac Icu)              | 20 / 25 / 30 / 35kA               |
| Rated breaking capacity to IEC 60947-2 (525 Vac Ics)              | 16.5 / 20 / 25 / 25kA             |
| Rated breaking capacity to IEC 60947-2 (690 Vac Icu)              | 8 / 10 / 15 / 20kA                |
| Rated breaking capacity to IEC 60947-2 (690 Vac Ics)              | 4 / 5 / 7.5 / 10kA                |
| Rated breaking capacity to IEC 60947-2 (125V DC Icu)              |                                   |
| Rated breaking capacity to IEC 60947-2 (250V DC 2P in series Ics) | 22 / 22 / 25kA                    |
| Frequency                                                         | 50/60Hz                           |
| Trip Unit Type                                                    | PXR10                             |
| Continuous Current Range                                          | 320 - 800A                        |
| 100% UL489 Rated                                                  | Yes                               |
| Instantaneous/Short Circuit Range                                 | 2 - 8 In                          |
| Magnetic/Instantaneous Override                                   | 6800A                             |
| Dimensions H x W x D (inches)                                     | 16 x 8.25 x 4.38                  |
| Pole to pole distance inches                                      | 2,75                              |
| Approx Weight lbs                                                 | 29,98                             |
| RoHS Compliance                                                   | Yes                               |
| UL File Number                                                    | E7819                             |
| Ambient Temp Calibration                                          |                                   |
| Derating at 50C                                                   |                                   |
| Derating at 60C                                                   |                                   |
| Derating at 70C                                                   |                                   |

1. 480Vac corresponds to 277Vac for 1P
2. 600Vac corresponds to 347Vac for 1P



**Molded Case Circuit Breakers**  
**Power Defense™ UL Global Series**  
**Part Number: PDG53K1200E3RNNNNNNN**



Datasheet creation date: 19/08/2019

**PRODUCT VIEW** *(Use Mouse to Rotate and Zoom)*

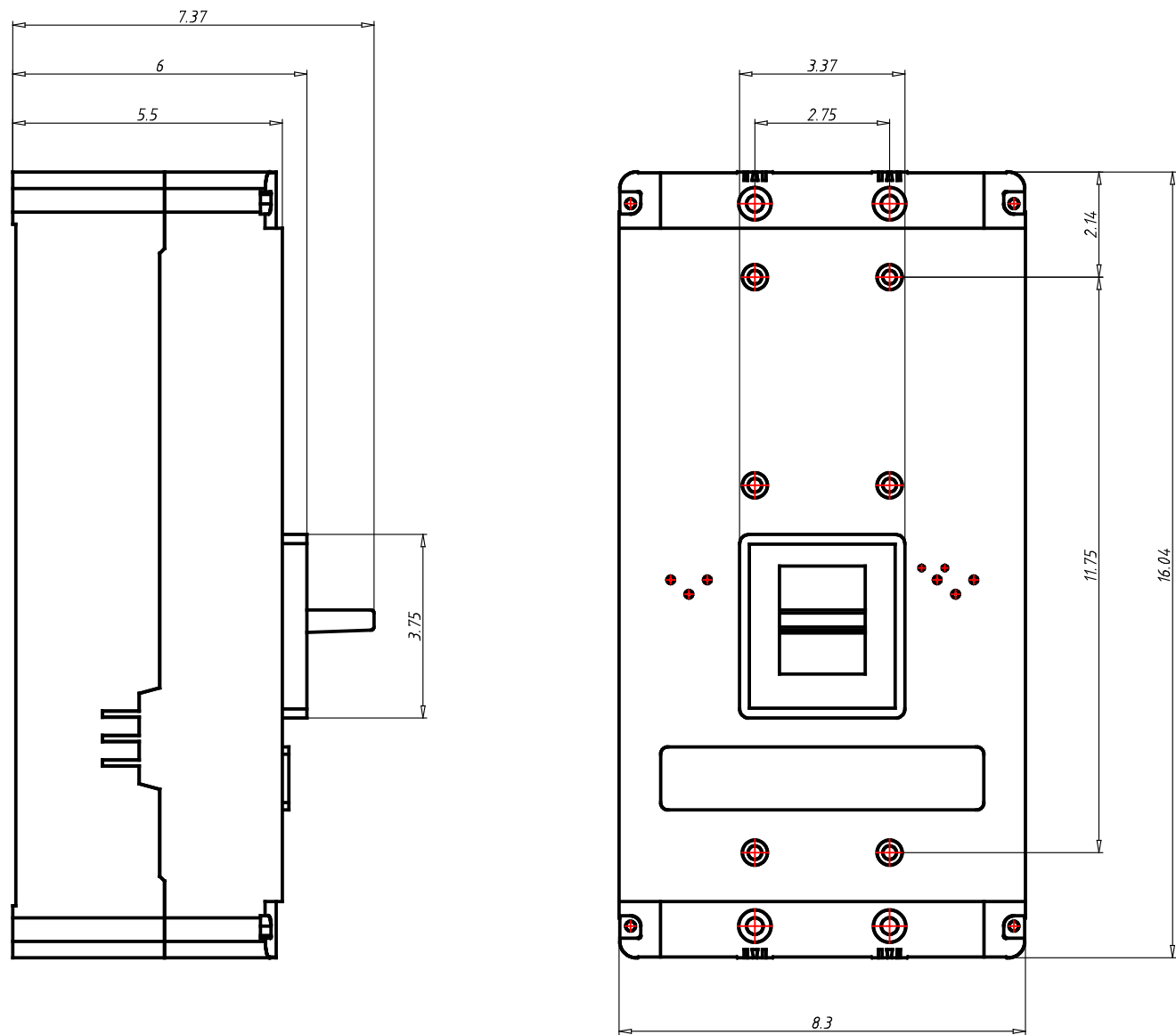
Eaton's Power Defense™ molded case circuit breakers, a globally rated platform designed to help keep your power system safe with latest protection technology. Engineered for the future: IoT and Industry 4.0 features such as built-in communications, advanced energy metering, and algorithms that signal breaker maintenance; zone selective interlock technology that clears faults quickly and locally; ArcFlash reduction options that help protect your people, and not to mention Eaton's best-in-class support and service.

**Tech Data for Configured Product**

|                                             |                      |
|---------------------------------------------|----------------------|
| Power Defense Catalog Number                | PDG53K1200E3RNNNNNNN |
| Frame Size                                  | Frame 5              |
| Poles                                       | 3 Pole               |
| Voltage                                     | 480V AC              |
| Interruption or Breaking Capacity (Icu/Ics) | 50kA                 |
| Continuous Current Rating (In)              | 1200A                |
| Trip Unit Type                              | PXR20                |
| Trip Unit Options 1                         | LSIG                 |
| Trip Unit Options 2                         | Relays               |
| Indicating Accessories                      | None                 |
| Indicating Accessories Terminal             | None                 |
| Tripping Accessories                        | None                 |
| Tripping Accessory Terminal                 | None                 |
| Tripping Accessory Voltage                  | None                 |
| Line Type Description                       | None                 |
| Line Conductor Options                      | N/A                  |
| Line Terminal Type                          | N/A                  |
| Load Type Description                       | None                 |
| Load Conductor Options                      | N/A                  |
| Load Terminal Type                          | N/A                  |
| Special Options - Type of Modification      | None                 |
| Details                                     | None                 |
| Additional Description                      | None                 |



Technical drawings





**Molded Case Circuit Breakers**  
**Power Defense™ UL Global Series**  
**Part Number: PDG53K1200E3RNNNNNNN**

**General Technical Data**

|                                                                   |                                   |
|-------------------------------------------------------------------|-----------------------------------|
| Frame Rating (In)                                                 | 1200A                             |
| Reference Standard                                                | UL489, CSA 22.2, IEC 60947-2 & GB |
| Number of poles                                                   | 3                                 |
| Neutral rating                                                    | -                                 |
| Interruption Rating Designator                                    | K / M / N / P / T                 |
| UL Interruption Rating to UL 489 (240Vac)                         | 85 / 100 / 150 / 200 / 200kA      |
| UL Interruption Rating to UL 489 (480Vac)                         | 50 / 65 / 85 / 100 / 150kA        |
| UL Interruption Rating to UL 489 (600Vac)                         | 25 / 35 / 50 / 65 / 65kA          |
| UL Interruption Rating to UL 489 (125/250Vdc)                     |                                   |
| UL Current Limiting                                               | -                                 |
| Rated breaking capacity to IEC 60947-2 (220-240 Vac Icu)          | 85 / 100 / 150 / 200kA            |
| Rated breaking capacity to IEC 60947-2 (220-240 Vac Ics)          | 85 / 100 / 100 / 150kA            |
| Rated breaking capacity to IEC 60947-2 (380-415 Vac Icu)          | 50 / 70 / 70 / 100kA              |
| Rated breaking capacity to IEC 60947-2 (380-415 Vac Ics)          | 50 / 50 / 50 / 50kA               |
| Rated breaking capacity to IEC 60947-2 (440 Vac Icu)              | 35 / 50 / 70 / 100kA              |
| Rated breaking capacity to IEC 60947-2 (440 Vac Ics)              | 35 / 40 / 50 / 50kA               |
| Rated breaking capacity to IEC 60947-2 (525 Vac Icu)              | 25 / 30 / 35 / 40kA               |
| Rated breaking capacity to IEC 60947-2 (525 Vac Ics)              | 20 / 25 / 25 / 25kA               |
| Rated breaking capacity to IEC 60947-2 (690 Vac Icu)              | 10 / 15 / 20 / 35kA               |
| Rated breaking capacity to IEC 60947-2 (690 Vac Ics)              | 5 / 7.5 / 10 / 18kA               |
| Rated breaking capacity to IEC 60947-2 (125V DC Icu)              |                                   |
| Rated breaking capacity to IEC 60947-2 (250V DC 2P in series Ics) | 25                                |
| Frequency                                                         | 50/60Hz                           |
| Trip Unit Type                                                    | PXR20                             |
| Continuous Current Range                                          | 500 - 1200A                       |
| 100% UL489 Rated                                                  | Yes                               |
| Instantaneous/Short Circuit Range                                 | 2 - 10 In                         |
| Magnetic/Instantaneous Override                                   | 14400A                            |
| Dimensions H x W x D (inches)                                     | 16 x 8.25 x 5.5                   |
| Pole to pole distance inches                                      | 2,75                              |
| Approx Weight lbs                                                 | 45                                |
| RoHS Compliance                                                   | Yes                               |
| UL File Number                                                    | E7819                             |
| Ambient Temp Calibration                                          |                                   |
| Derating at 50C                                                   |                                   |
| Derating at 60C                                                   |                                   |
| Derating at 70C                                                   |                                   |

1. 480Vac corresponds to 277Vac for 1P
2. 600Vac corresponds to 347Vac for 1P



# Digital Linear Chargers

## Specifications

- Waterproof, shock-and vibration-resistant aluminum construction
- Saltwater tested and fully corrosion-resistant
- Short circuit, reverse polarity, and ignition protected
- For use with 12V/6 cell batteries that are flooded/wet cell, maintenance free or starved electrolyte (AGM) only
- FCC compliant
- UL listed to marine standard 1236
- 3 year warranty
- Replaces all existing current on-board chargers (excluding portables)
- No Price Increase
- Availability: November 2010



### DIGITAL LINEAR ON-BOARD CHARGERS

| PRODUCT CODE | PRODUCT DESCRIPTION        |
|--------------|----------------------------|
| 1821065      | MK 106D (1 bank x 6 amps)  |
| 1821105      | MK-110D (1 bank x 10 amps) |
| 1822105      | MK-210D (2 bank x 5 amps)  |
| 1823155      | MK-315D (3 bank x 5 amps)  |
| 1822205      | MK-220D (2 bank x 10 amps) |
| 1823305      | MK-330D (3 bank x 10 amps) |
| 1824405      | MK-440D (4 bank x 10 amps) |
| 1822305      | MK-230D (2 bank x 15 amps) |
| 1823455      | MK-345D (3 bank x 15 amps) |
| 1824605      | MK-460D (4 bank x 15 amps) |



# Digital Linear Chargers

## Specifications (cont.)

- New 4-color package design



minnkotamotors.com

**minnkota**

**ON-BOARD MARINE BATTERY CHARGER**

DIGITALLY CONTROLLED 2X FASTER CHARGING PROTECTS BATTERIES

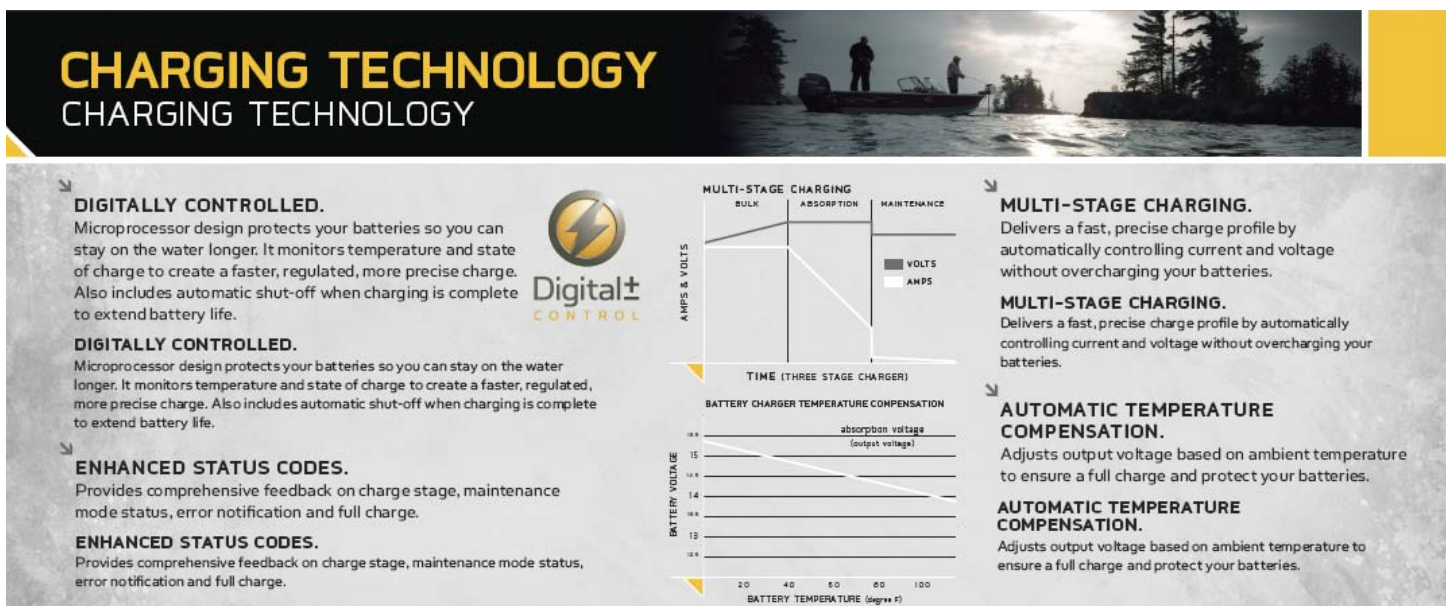
**Digital<sup>±</sup> CONTROL**

**MK210D**

**10AMPS**

**MK 210D**  
2 CHARGING BANKS  
5 AMPS PER BANK  
10 AMPS TOTAL OUTPUT

MADE IN THE USA FC



**CHARGING TECHNOLOGY**  
CHARGING TECHNOLOGY

**DIGITALLY CONTROLLED.**  
Microprocessor design protects your batteries so you can stay on the water longer. It monitors temperature and state of charge to create a faster, regulated, more precise charge. Also includes automatic shut-off when charging is complete to extend battery life.

**DIGITALLY CONTROLLED.**  
Microprocessor design protects your batteries so you can stay on the water longer. It monitors temperature and state of charge to create a faster, regulated, more precise charge. Also includes automatic shut-off when charging is complete to extend battery life.

**ENHANCED STATUS CODES.**  
Provides comprehensive feedback on charge stage, maintenance mode status, error notification and full charge.

**ENHANCED STATUS CODES.**  
Provides comprehensive feedback on charge stage, maintenance mode status, error notification and full charge.

**Digital<sup>±</sup> CONTROL**

**MULTI-STAGE CHARGING**  
BULK ABSORPTION MAINTENANCE  
AMPS & VOLTS  
TIME (THREE STAGE CHARGER)  
BATTERY CHARGER TEMPERATURE COMPENSATION  
BATTERY VOLTAGE  
BATTERY TEMPERATURE (degrees F)

**MULTI-STAGE CHARGING.**  
Delivers a fast, precise charge profile by automatically controlling current and voltage without overcharging your batteries.

**MULTI-STAGE CHARGING.**  
Delivers a fast, precise charge profile by automatically controlling current and voltage without overcharging your batteries.

**AUTOMATIC TEMPERATURE COMPENSATION.**  
Adjusts output voltage based on ambient temperature to ensure a full charge and protect your batteries.

**AUTOMATIC TEMPERATURE COMPENSATION.**  
Adjusts output voltage based on ambient temperature to ensure a full charge and protect your batteries.

2010

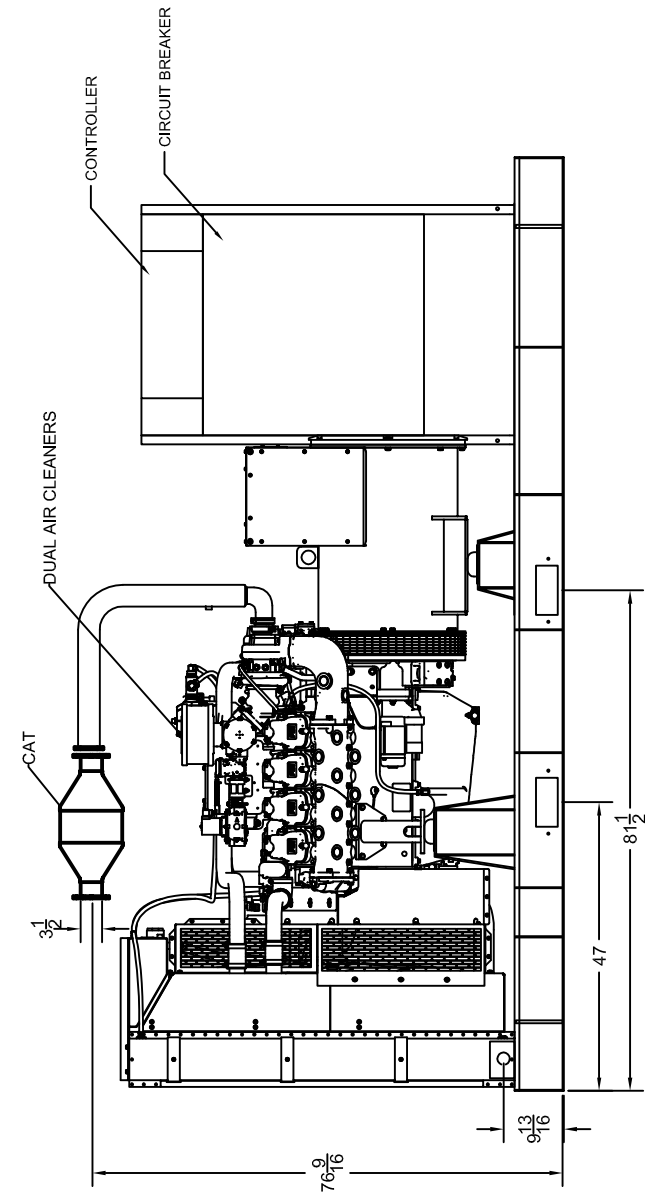
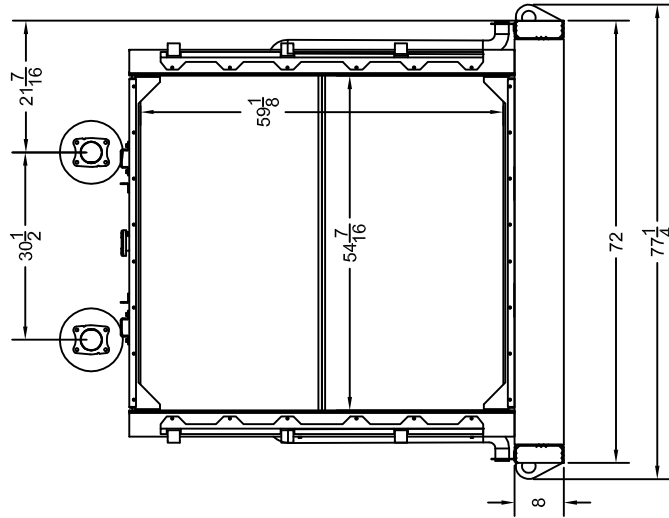
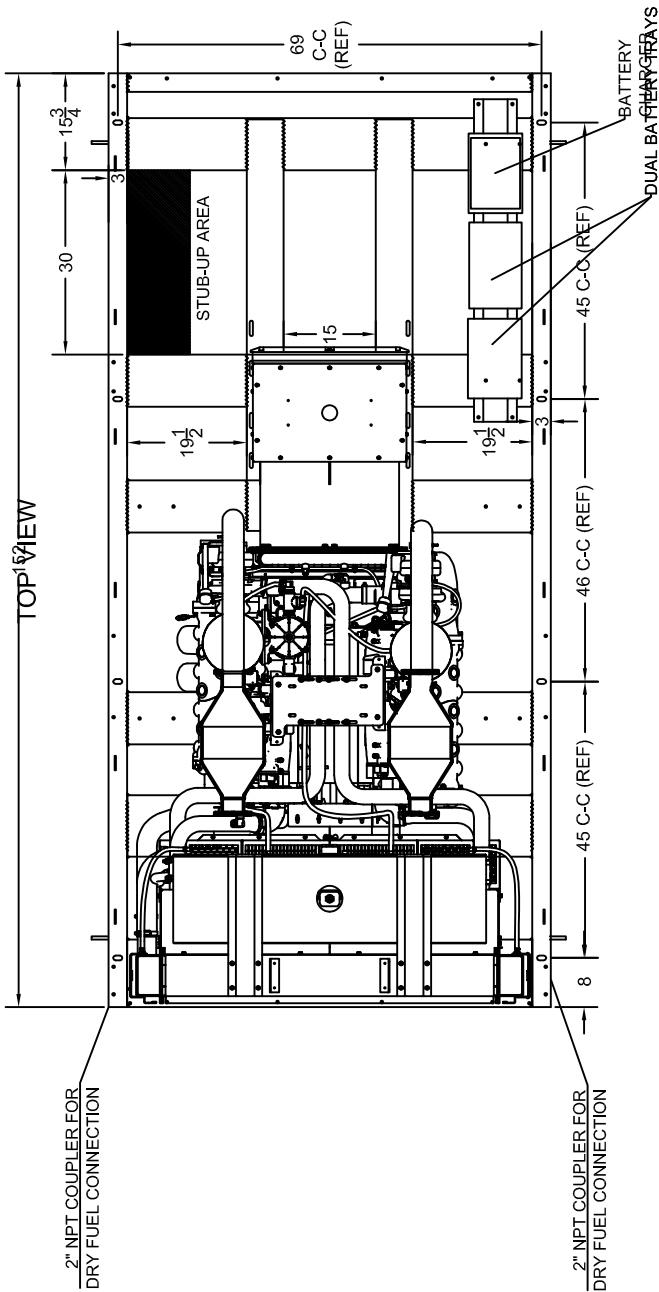








# SP-2650 OPEN DIMENSIONAL OVERVIEW

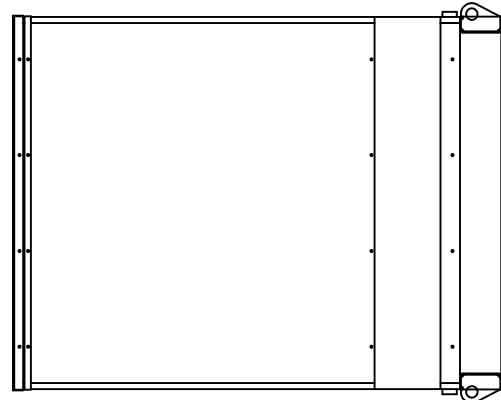
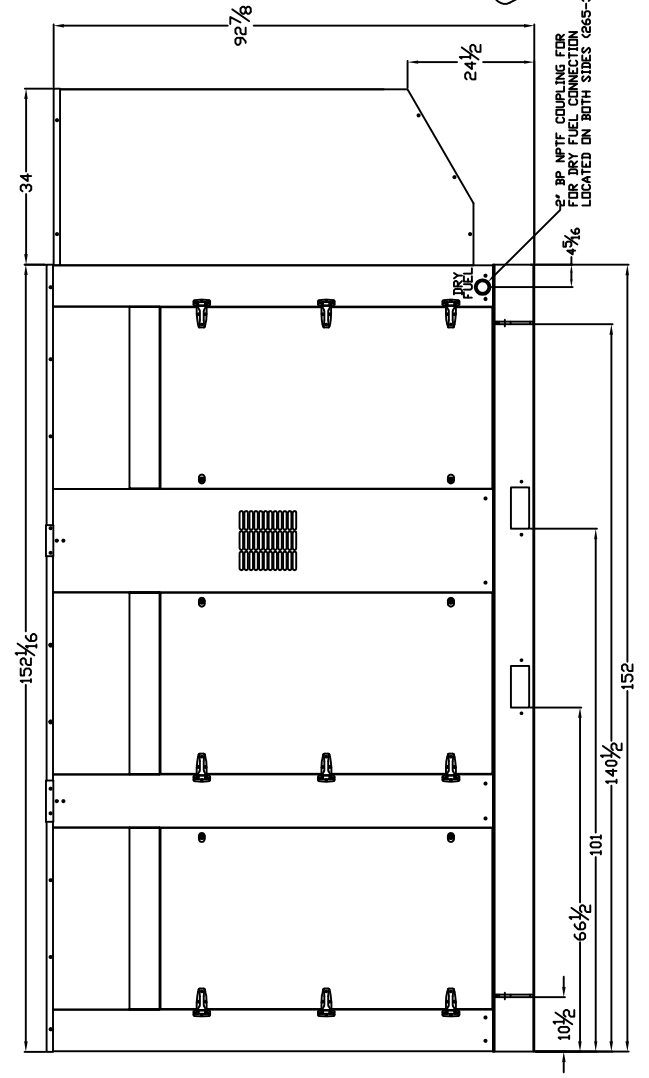
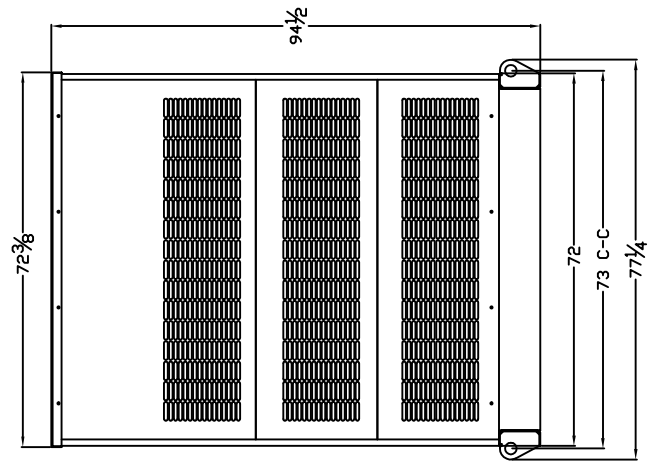
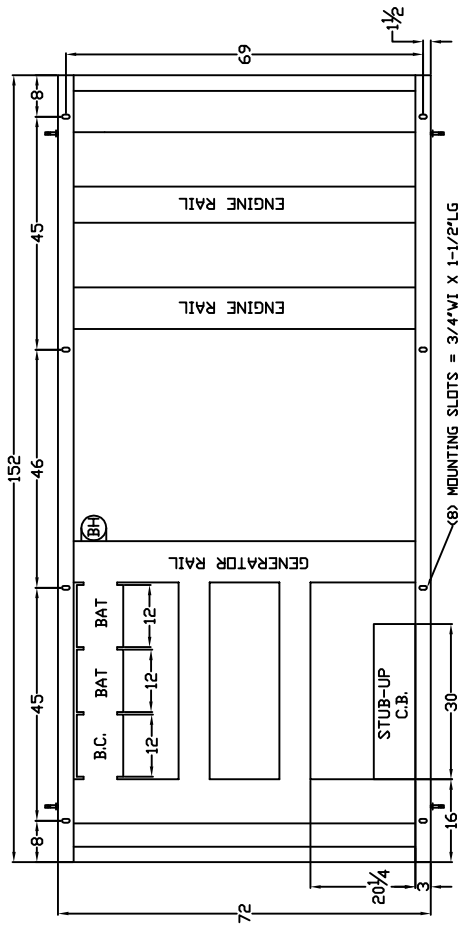
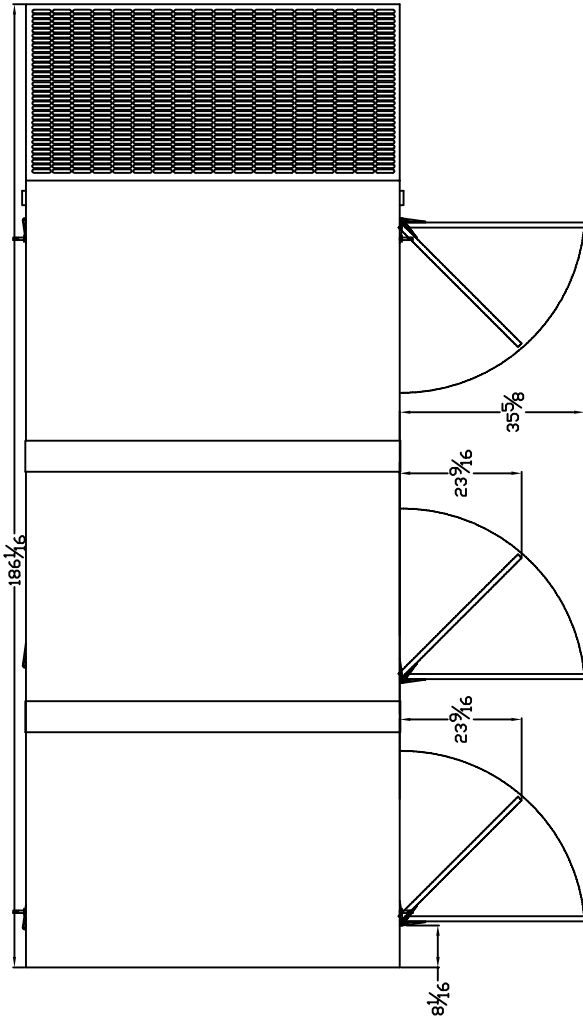




## LEVEL 2 ENCLOSURE OUTLINE DIMENSIONS

## FRAME VIEW

(GEN-SET HAS (6) DOORS, (3) SHOWN OPEN ARE TYPICAL FOR BOTH SIDES)



## GENERATOR END VIEW

## SIDE VIEW

## RADIATOR END VIEW



Member \_\_\_\_\_ moved and Member \_\_\_\_\_ seconded a motion that the following resolution be read and adopted this XX day of month 2025.

**RESOLUTION NO.**

**A RESOLUTION TO ALLOW THE USE OF A PRIVATE UTILITY BUILDING AT  
3819 WEST BROADWAY  
(US Internet)**

**WHEREAS**, the property owners of 3819 West Broadway want to construct a private utility building on the property that requires a Conditional Use Permit; and

**WHEREAS**, the Planning Commission conducted a public hearing on February 20, 2025 and adopted a motion recommending approval of the Conditional Use Permit request based upon the following findings of fact:

- a. The proposed private utility building supports the residential-business use which is consistent with the Comprehensive Plan.
- b. Staff do not see deterioration of the neighborhood because of this use.

**WHEREAS**, the Council accepts these findings:

- a. The proposed private utility building supports a residential-business use which is consistent with the Comprehensive Plan.
- b. The neighboring properties have their buildings setback in a similar distance to West Broadway.
- c. This use will not deteriorate the neighborhood because of this use.
- d. The building design and materials used are required to be consistent with neighboring designs.

**NOW THEREFORE, BE IT RESOLVED**, by the City Council of the City of Robbinsdale, Minnesota, that the Conditional Use Permit request Z25-2 to allow a private utility building at 3819 West Broadway (legally described in Attachment D) pursuant to Section 535.01, Subd. 2 (d) is hereby approved with the following conditions

1. On site emergency power generator will not exceed 70dBA in sound.
2. This property will be permitted 5 parking spaces with 1 handicap stall.
3. All future fiber optic cable installations inside the right of way must be routed in a manner authorized by the City Engineer with appropriate permits applied for.
4. A construction building permit is required.
5. The applicant is requesting this service use to be able to operate their business within the city and bring fiber optic internet for residents businesses.
6. The plan set for the building shows that they will not create hazards to the surrounding areas.
7. Staff does not foresee this use leading to or encourage disturbing influences in the neighborhood.

The question was on the adoption of the resolution and upon a vote being taken thereon, and the following voted in favor thereof:

And the following voted against the same:

WHEREUPON SAID RESOLUTION WAS DECLARED DULY PASSED AND ADOPTED THIS XX DAY OF MONTH 2025.

---

Bradley Sutton, Mayor

Attest:

---

Chase Peterson-Etem, City Clerk



City of Robbinsdale

Public Hearing Notice

**NOTICE IS HEREBY GIVEN** that there will be a Public Hearing of the Planning Commission of the City of Robbinsdale, Minnesota on **Thursday, February 20th, 2025, at 7:00 p.m.** for consideration of a Conditional Use Permit at 3819 West Broadway for the use of a Private Utility Building. The meeting will be held in the City Council Chambers at Robbinsdale City Hall, 4100 Lakeview Ave. N, Robbinsdale MN 55422.

Any and all persons desiring to be heard shall be given an opportunity at the above stated time. Residents seeking further information on the public hearing should contact Assistant Planner Will Bucheger at 763-531-1269 or [wbucheger@robbinsdalemn.gov](mailto:wbucheger@robbinsdalemn.gov).

By: Will Bucheger, Assistant Planner

January 9th, 2025

Will Bucheger  
Assistant Planner  
Robbinsdale City Hall  
4100 Lakeview Ave N  
Robbinsdale, Minnesota 55422

Dear Will Bucheger,

I am formally requesting a 60-day extension for our Conditional Use Permit application pertaining to our project located at 3819 W Broadway, Robbinsdale, Minnesota 55422. Our application was submitted on December 19, 2024. We are requesting an extension due to the practical challenges associated with positioning the building at the required setback of 3 feet from West Broadway (as required within this Transit Overlay District). We plan to submit a variance request with our Conditional Use Permit to outline this issue. We sincerely appreciate your consideration of this request and your ongoing support.

Best regards,



Zach Johnson  
Facilities Administrator  
Us Internet Corp.



TO: Planning Commission

PREPARED BY: Will Bucheger, Assistant Planner

DATE: February 20, 2025

RE: Variance Request for 3819 West Broadway

---

**Background:**

US Internet has submitted a variance for the property of 3819 West Broadway for the purpose of constructing a building 30ft. away from the front yard property line adjacent to West Broadway. The location is shown in **Attachments A**.

US Internet is interested in constructing a private utility building within the city so that they may be able to operate their fiber optic internet business. The property they wish to construct this business at is 3819 West Broadway, the current Robbinsdale Clinic. There is an existing building on the property, US Internet wish to demolish this building and construct a new one following a CUP. Staff review of their CUP revealed that they are not meeting the required front yard setback requirements per the Transit Overlay District (TOD) and will require a variance. US Internet desire their building to be setback 30ft. from the front yard property line over safety concerns of the building and subsequent equipment inside. They stated that if they follow the current standards for the TOD, it could cause an unfortunate accident next to a highly utilized street. You can view the application and site plan in **Attachment B**.

**Analysis:**

**TRANSIT OVERLAY DISTRICT STANDARDS:**

A portion of this property is within the West Broadway corridor of the TOD, and as such the standards for this district will need to be implemented for this project. The TOD has two different setbacks for buildings along West Broadway, commercial and residential.

The front yard setbacks for the TOD are:

| <b>BUILDING SETBACKS</b>                       |                                                         |
|------------------------------------------------|---------------------------------------------------------|
| a. A-street (West Broadway)                    | 3 ft. max. commercial<br>12 ft. max residential         |
| b. B-street (Bottineau Blvd.; Hubbard Ave. N.) | 3 ft. min. (no maximum)                                 |
| c. Side property line                          | 0 ft. (party wall) or<br>6 ft. min. (between buildings) |
| d. Rear property line                          | Applicable zoning district standard                     |

The intended use of the property would not be seen as commercial or residential in city staff's opinion. Meaning no one will be residing there nor will there be any sale happening within the building, it will solely be used as a center and focal point for the fiber optic connection within the city and surrounding areas. Staff views this use more as an industrial use. Though with no

setback standards mentioned for industrial use, staff need to enforce the commercial standards for this property.

### **VARIANCES:**

Subd. 2. Authority/variances. The City Council, acting as the board of appeals and adjustments, upon the receipt of the recommendation of the Planning Commission, shall have the authority to consider and grant variances to the provisions of this code, including the expansion of nonconformities subject to the following:

(a) variances shall only be granted;

(1) when the variance is in harmony with the purposes and intent of the code; **US Internets proposed use isn't retail or residential and will match the setback distance of other buildings along the southern side of West Broadway;** and

(2) when the variance is consistent with the comprehensive plan. **This property is within the commercial mixed-use area of the Comprehensive Plan;** (Added, Ord. No. 11-14)

(b) as part of the determination of whether to grant a variance, the applicant may also be required to establish that there are practical difficulties in complying with this code. "Practical difficulties," as used in connection with the granting of a variance, means that:

(1) the property owner proposes to use the property in a reasonable manner not permitted by the code. **The applicants setback request will mirror the setback distance of both the northern and southern property adjacent to it;**

(2) the plight of the landowner is due to circumstances unique to the property and not created by the landowner; **This property is abnormal since only half of the lot is within the TOD, if this property was only within the R-B Zoning District this request would be approved;** and

(3) the variance, if granted, will not alter the essential character of the locality.

Economic considerations alone do not constitute practical difficulties. Practical difficulties include, but are not limited to, inadequate access to direct sunlight for solar energy systems. **Staff do foresee this request altering the essential character of the neighborhood or locality.** (Added, Ord. No. 11-14)

### **PUBLIC HEARING:**

Notice of this public hearing was published in the city's official newspaper and posted on the city's bulletin board 10 days prior to this meeting. Mailed notices have also went out to all properties 350 feet away from this address. City staff have received no inquiries from residents at the time of this report.

### **Recommendation:**

1. Hold the public hearing.
2. Motion to recommend that: the City Council approve the Variance request V25-1 draft resolution to allow a front yard setback of 30ft at 3819 West Broadway.

### **Attachments:**

1. Attachment A - Hennepin County Aerial Map
2. Attachment B - US Internet Variance Application
3. Attachment C - Draft Resolution
4. Attachment D - Public Hearing Notice





PARCEL ID: 0602924410017

OWNER NAME: Rbbnsdl Cinc Hldng Co Llc

PARCEL ADDRESS: 3819 West Broadway, Robbinsdale MN 55422

PARCEL AREA: 0.45 acres, 19,527 sq ft

A-T-B: Abstract

SALE PRICE: \$245,000

SALE DATE: 09/1998

SALE CODE: Excluded From Ratio Studies

ASSESSED 2023, PAYABLE 2024

PROPERTY TYPE: Commercial-Preferred

HOMESTEAD: Non-Homestead

MARKET VALUE: \$655,000

TAX TOTAL: \$18,973.48

ASSESSED 2024, PAYABLE 2025

PROPERTY TYPE: Commercial

HOMESTEAD: Non-Homestead

MARKET VALUE: \$590,000

## Comments:

This data (i) is furnished 'AS IS' with no representation as to completeness or accuracy; (ii) is furnished with no warranty of any kind; and (iii) is not suitable for legal, engineering or surveying purposes. Hennepin County shall not be liable for any damage, injury or loss resulting from this data.

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COUNTY 2025



To review references visit our website at [www.robbinsdalemn.com](http://www.robbinsdalemn.com)

SUBDIVISION VARIANCE OR APPEAL (reference Section 500.39)

Applicant U.S. Internet Corporation

Address 3819 W Broadway, Robbinsdale, MN 55422

Owner (if different from Applicant) \_\_\_\_\_

Owners Address 12450 Wayzata Blvd, Suite 315, Minnetonka, MN 55305

Day Phone # 612-401-5316 Cell Phone # 612-401-5316 Email address zjohnson@usinternet.com

Applicant's Authority (if other than Owner) \_\_\_\_\_

Legal Description of Property Lot 023 A Auditors Subd. No. 180 65x300.8

Present Zoning Classification R-B Existing Use of Property Medical and General Office

Area of Property 0.45 acres Section of Ordinance(s): 515.07. R-B Residential Business District

Please describe the proposed use/request in appropriate detail (attach additional sheets if necessary): U.S. Internet is proposing a new internet utility service building / data center building. A variance is requested for the required setback and glazing requirements due to the practical difficulty of placing a utility building directly against a major road.

Application for rezoning, conditional use permit, non-conforming use permit or zoning text amendment will not be accepted until the applicant has provided the information required by the applicable sections of the zoning code (see above reference). The minimum information is summarized below:

1. Detailed written and graphic material fully explaining the request.
2. Certificate of Survey of property (3 copies) showing the following:
  - A. Location and dimensions of the existing and proposed structure(s) along with setbacks on the lot.
  - B. Location and use of adjacent structures.
3. Existing scaled floor plans, scaled elevations, and any proposed changes.
4. Application Fee
5. Floodplain Information, if applicable (see back page).

Applications must be received 4 weeks prior to the Planning Commission meeting at which request is to be heard.

Application Deadline: 01-23-2025 Application Fee \$200.00 Receipt # \_\_\_\_\_

Planning Commission Date 02-20-2025 \*City Council Date(s) 03-04-2025 & 03-18-2025  
(\*Tentative: final date will be announced at the Planning Commission meeting.)

The undersigned acknowledges/declares that all the facts and representations stated in this application are true and by signing, acknowledges the cost and the procedure for the processing of this application and certifies that the property described by the provided address is not tax delinquent. Furthermore, undersigned grants City staff entry upon the land in question to perform any necessary site inspections during the duration of the project. Applicant should be represented at the Planning Commission meeting and the City Council public hearing.

Signature of Applicant (and Owner if other than applicant)

\*Applicant may be liable for additional expenses such as legal fees.

\*\*Applicant may be billed for additional staff time.

1-22-2025  
Date



## **Written Narrative - 3819 W Broadway, Robbinsdale, MN 55422**

### **Summary of Request**

U.S. Internet is proposing a new internet utility service building / data center building on this site, located between West Broadway and Hubbard Ave N. The site is currently zoned as an R-B residential-business district within a Transit Overlay District (TOD). There is currently one building on the site that operates as a medical clinic and is setback over 100 feet from W Broadway. The TOD requires a maximum three foot setback from W Broadway. U.S. Internet is requesting a variance to position the building near neighboring building setbacks, at 30 feet, and to be exempt from the required glazing due to the practical difficulties and safety concerns that would occur when situating a highly glazed utility building three feet from a busy street.

### **Zoning Ordinance**

U.S. Internet believes that positioning the utility building 30 feet from West Broadway will fulfill the purpose of the Transit Overlay District which is “to enhance and expand the pedestrian character of the downtown” and “to preserve the main street character of the West Broadway area” (Sec. 530.09 Subd. 1). By averaging the neighboring setbacks and replacing the existing parking with landscaping, the pedestrian experience will be enhanced and encouraged along W Broadway. The position of the building also aids in the transition from commercial to adjacent residential neighborhoods by providing a buffer in the form of vegetation and a residential-scale commercial building. Similarly, a 50% glazing requirement is impractical for a utility building with no public access. Excessive sunlight may damage the servers, and the windows would not provide an appealing view for pedestrians passing by. Similarly, adding windows to the rear of the building off of Hubbard would only provide views into the generator enclosure and reduce the sound-dampening effect of the CMU wall. Additionally, faux windows are an inefficient use of resources and do not align with the City of Robbinsdale’s sustainability goals or Energy Action Plan.

### **Character**

It is U.S. Internet’s intention to not alter the essential character of the neighborhood and to provide a building that carefully bridges the commercially-oriented buildings on West Broadway with the residential neighborhood along Hubbard Ave. Most of the buildings along West Broadway are significantly setback from the road. Specifically, the Good Samaritan Society, located to the south, is setback over 50 feet on the southern portion of the site and over 175 feet on the portion closest to the site. Similarly, the Chapel of the Innocents to the north is over 35 feet setback from Broadway. By positioning the building at a 30-foot setback near the Chapel of the Innocents, we aim to preserve the neighborhood’s character and create a more cohesive alignment with the neighboring buildings. Additionally, many of the buildings along West Broadway do not conform to the 50% glazing requirement, especially the businesses nearby. Instead of using windows, we propose incorporating brick detailing to add a human-scaled element to the facade while avoiding any potentially negative impacts of glazing.

### **Safety Concerns**

The primary purpose for the increased setback distance and no glazing is to address safety concerns. If the building were to be setback three feet from West Broadway, the likelihood of a vehicular crash with the building would rise significantly. Such an incident would not only pose a severe risk to the driver, but could result in widespread internet outages affecting hundreds of people nearby. Windows would increase the likelihood of physical damage to the server room which could extend the outage for weeks. Given the heavy reliance on reliable, fast internet for daily business functions, the consequences of such a disruption could be highly detrimental to the neighborhood. Seeing as the building would not receive customer visitation and would remain largely vacant throughout the day, there is no compelling reason to position it so close to the road or include windows. A modest setback with brick detailing will mitigate the risk of damage while fulfilling the intended goals of the City of Robbinsdale’s code requirements.

ALTA/NSPS LAND TITLE SURVEY FOR:  
US INTERNET

LEGAL DESCRIPTION:

Lot 23, Auditor's Subdivision No. 180, according to the plat thereof on file and of record, Hennepin County, Minnesota

Abstract property

GENERAL SURVEY NOTES:

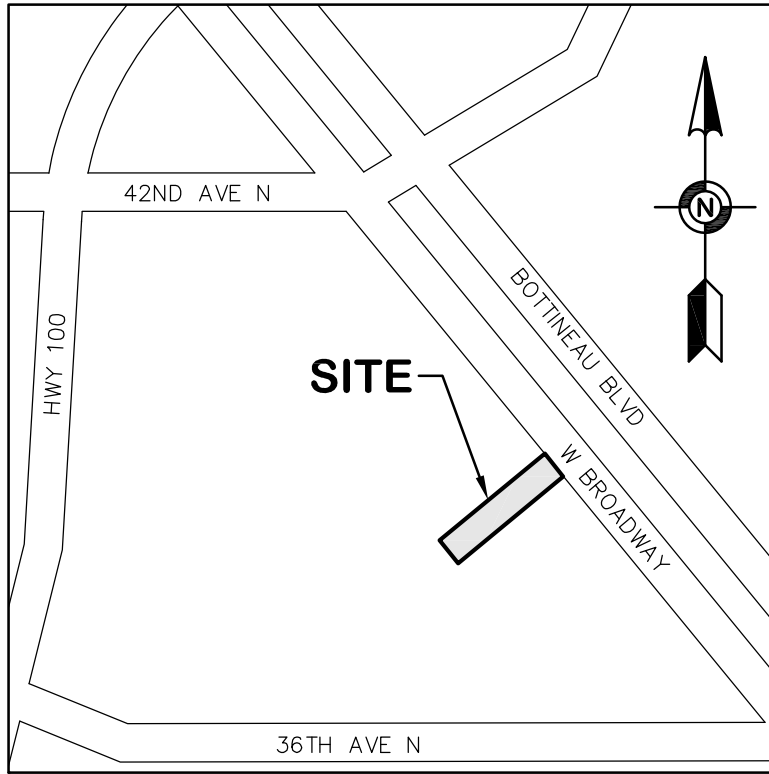
- The orientation of this bearing system is based on the Hennepin County coordinate grid (NAD 83-2011 Adj.).
- The legal description and easement information used in the preparation of this survey is based on the Commitment for Title Insurance prepared by Old Republic National Title Insurance Company, Commitment No. ORTE750222 dated September 29, 2024 at 7:00 A.M..
- The surveyed property has direct access to West Broadway and Hubbard Avenue North, both being right of ways.
- No evidence of cemeteries, burial grounds or gravesites was observed in the process of conducting the fieldwork.

OPTIONAL TABLE A ITEMS:

- Monuments have been placed at all major corners of the surveyed property described hereon, unless already marked or referenced by existing monuments or witnesses in close proximity to the corner.
- The address of the property described hereon is 3819 West Broadway Robbinsdale, Minnesota 55422
- The property described hereon lies within Flood Zone "X" (areas of minimal flood hazard) per Federal Insurance Rate Map No. 27053C 0214 F, dated November 4, 2016.
- The total area of the property described hereon is 19,647 square feet or 0.45103 acres.
- No zoning report or letter was received from the insurer pursuant to Optional Table A Item 6(a), as set forth in the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys.
- Exterior building dimensions are depicted hereon.
- The exterior building footprint area at ground level is depicted hereon.
- The measured building height is depicted hereon.
- Substantial features observed in the process of conducting the fieldwork are depicted hereon.
- As of the date of this survey the property described hereon contains a total of 1 handicapped space.
- Existing utilities, services and underground structures shown hereon were located either physically, from existing records made available to us, by resident testimony, or by locations provided by Gopher State One Call, per Ticket No. 242782685. However, lacking excavation, the exact location of underground features cannot be accurately, completely and reliably depicted. Where additional or more detailed information is required, the client is advised that excavation may be necessary. Other utilities and services may be present and verification and location of all utilities and services should be obtained from the owners of the respective utilities prior to any design, planning or excavation.
- The names of adjoining owners according to current tax records are depicted hereon.
- The intersection of West Broadway and 39th Avenue North is located 400 feet Northwest of the Northwest corner of the surveyed property.
- As of the date of this survey there is no observable evidence of current earth moving work, building construction or building additions on the property described hereon.
- The plottable offsite easements or servitudes disclosed in documents provided to the surveyor are depicted hereon.

SURVEY ITEMS PER SCHEDULE B:

There are no survey related items in Schedule B, Part II



VICINITY MAP  
NOT TO SCALE

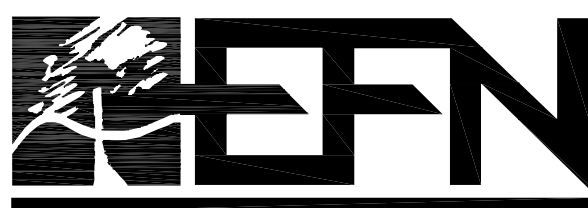
CERTIFICATION:

To U. S. Internet Corp., a Minnesota Corporation; Robbinsdale Clinic Holding Company, LLC, a Minnesota limited liability company; and Old Republic National Title Insurance Company:

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 6(a), 7(a), 7(b)(1), 7(c), 8, 9, 11(a), 13, 14, 16, and 18 of Table A thereof. The fieldwork was completed on October 11, 2024.

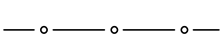
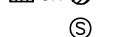
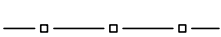
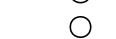
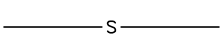
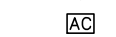
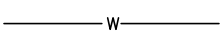
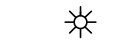
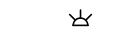
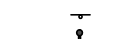
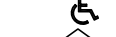
Date of Plat or Map: October 17, 2024

  
Eric A. Roeser  
Minnesota License No. 47476  
eroeser@efnsurvey.com



475 Old Highway 8 NW, Suite 200  
New Brighton, Minnesota 55112  
PHONE: (612) 466-3300  
WWW.EFNSURVEY.COM  
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land surveyors since 1872

LEGEND:

- |                                                                                                              |                                                                                                      |
|--------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
|  CATCH BASIN                |  CHAIN LINK FENCE   |
|  SANITARY MANHOLE           |  WOOD FENCE         |
|  MANHOLE                    |  SANITARY SEWER     |
|  AIR CONDITIONER            |  WATERMAIN          |
|  LIGHT                      |  RETAINING WALL     |
|  BUILDING LIGHT             |  BITUMINOUS SURFACE |
|  GAS METER                  |  CONCRETE SURFACE   |
|  SIGN                       |  GRAVEL SURFACE     |
|  HANDICAPPED PARKING SPACE  |                                                                                                      |
|  POSSIBLE ENCROACHMENT ITEM |                                                                                                      |

LIST OF POSSIBLE ENCROACHMENTS:

Possible Encroachment Note:

An encroachment is defined as an illegal intrusion and is a matter of law, therefore, the surveyor is unable to identify certain features as encroachments. The following possible encroachment notes are intended to draw the user's attention only to major areas of concern. The surveyor does not guarantee that the items noted below are, in fact, encroachments or that all possible encroachments in the vicinity of boundary lines are depicted hereon.

- Fence crosses the northwesterly property line.

GOPHER STATE ONE CALL NOTE:

List of utilities notified per Gopher State One Call Ticket No. 242782685.

|                           |                          |
|---------------------------|--------------------------|
| COMCAST                   | MCI                      |
| CITY OF ROBBINSDALE       | METRO TRANSIT FACILITIES |
| CITY OF ROBBINSDALE FIBER | NORTH MEMORIAL HOSPITAL  |
| CENTURYLINK - CTCLQ       | XCEL ENERGY              |
| CENTER POINT ENERGY       |                          |

| FIELD BOOK                   | PAGE | FIELDWORK CHIEF: | REVISIONS |      |             |
|------------------------------|------|------------------|-----------|------|-------------|
|                              |      | LV               | NO.       | DATE | DESCRIPTION |
|                              |      | DRAWN BY: DAV    |           |      |             |
|                              |      | CHECKED BY: EAR  |           |      |             |
| DRAWING NAME: 42286 ALTA.dwg |      |                  |           |      |             |
| JOB NO. 42286                |      |                  |           |      |             |
| FILE NO. 5087                |      |                  |           |      |             |

ALTA/NSPS  
LAND TITLE SURVEY

SURVEY FOR:

US INTERNET

PROPERTY ADDRESS:

3819 West Broadway  
Robbinsdale, Minnesota 55422



1022 Lakeshore Dr

Ashland, WI 54806

715.292.6493 (phon

[www.meyergroupduluth.com](http://www.meyergroupduluth.com)

PRELIMINARY NOT  
FOR CONSTRUCTION

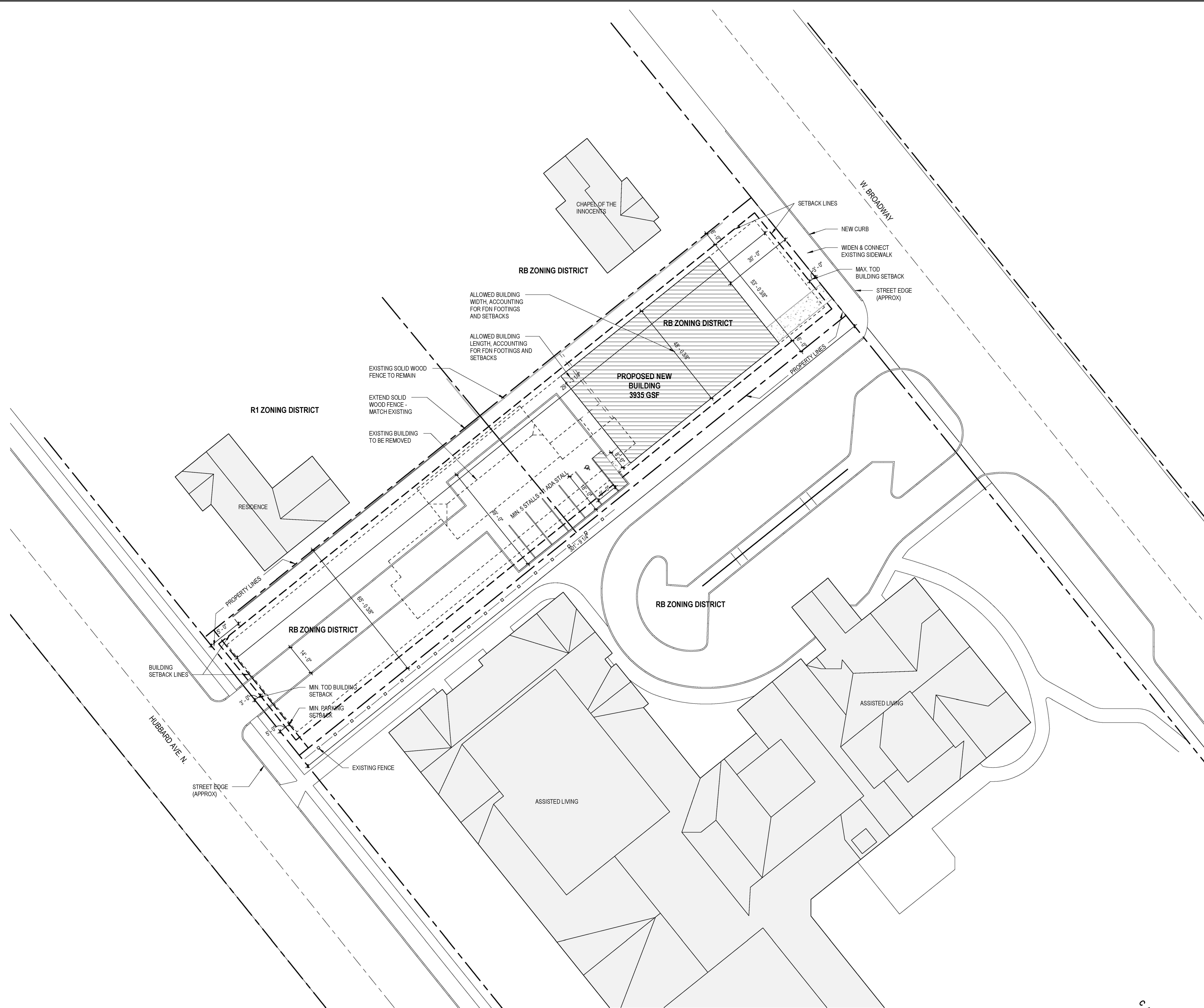
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US INTERNET  
ROBBINSDALE CO  
BUILDING

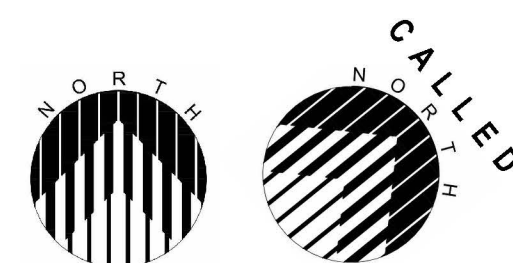
3819 WEST BROADWAY  
ROBBINSDALE, MN  
ZONING PLAN

CHECKED BY TLM

## A1.1

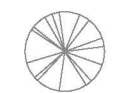
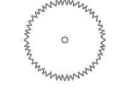
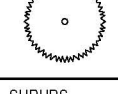
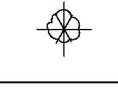


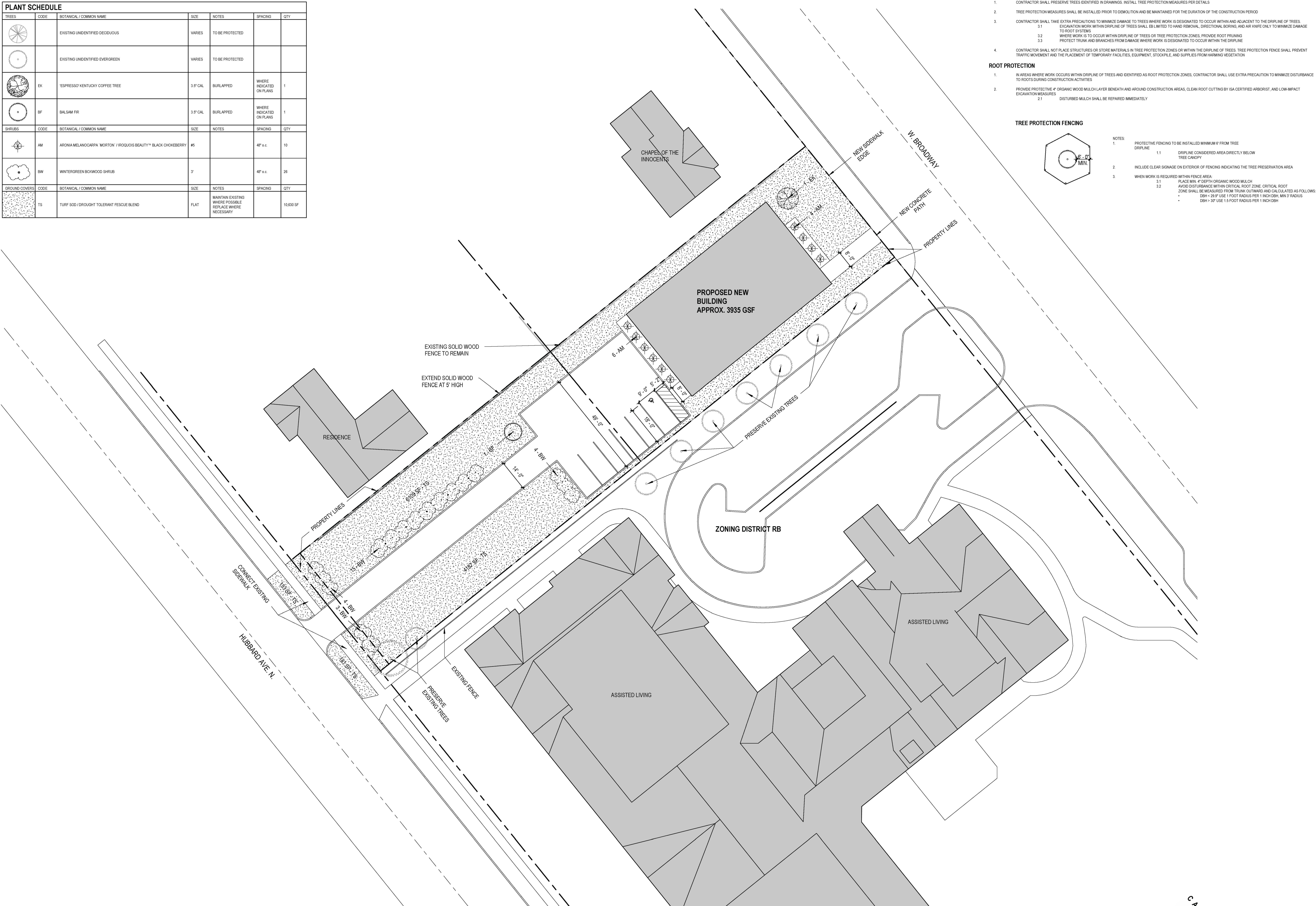
1 SITE PLAN  
1" = 20'-0"





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| PLANT SCHEDULE                                                                    |      |                                                                 |           |                                                             |                          |           |
|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------|-----------|-------------------------------------------------------------|--------------------------|-----------|
| TREES                                                                             | CODE | BOTANICAL / COMMON NAME                                         | SIZE      | NOTES                                                       | SPACING                  | QTY       |
|  |      | EXISTING UNIDENTIFIED DECIDUOUS                                 | VARIABLES | TO BE PROTECTED                                             |                          |           |
|  |      | EXISTING UNIDENTIFIED EVERGREEN                                 | VARIABLES | TO BE PROTECTED                                             |                          |           |
|  | EK   | 'ESPRESSO' KENTUCKY COFFEE TREE                                 | 3" CAL    | BURLAPPED                                                   | WHERE INDICATED ON PLANS | 1         |
|  | BF   | BALSAM FIR                                                      | 3" CAL    | BURLAPPED                                                   | WHERE INDICATED ON PLANS | 1         |
| SHRUBS                                                                            | CODE | BOTANICAL / COMMON NAME                                         | SIZE      | NOTES                                                       | SPACING                  | QTY       |
|  | AM   | ARONIA MELANOCARPA 'MORTON' / IROQUOIS BEAUTY™ BLACK CHOKEBERRY | #5        |                                                             | 48" o.c.                 | 10        |
|  | BW   | WINTERGREEN BOXWOOD SHRUB                                       | 3"        |                                                             | 48" o.c.                 | 26        |
| GROUND COVERS                                                                     | CODE | BOTANICAL / COMMON NAME                                         | SIZE      | NOTES                                                       | SPACING                  | QTY       |
|  | TS   | TURF SOG / DROUGHT TOLERANT FESCUE BLEND                        | FLAT      | MAINTAIN EXISTING WHERE POSSIBLE<br>REPLACE WHERE NECESSARY |                          | 10,630 SF |



TREE PRESERVATION NOTES

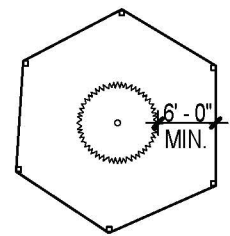
TREE PROTECTION

- CONTRACTOR SHALL PRESERVE TREES IDENTIFIED IN DRAWINGS. INSTALL TREE PROTECTION MEASURES PER DETAILS.
- TREE PROTECTION MEASURES SHALL BE INSTALLED PRIOR TO DEMOLITION AND BE MAINTAINED FOR THE DURATION OF THE CONSTRUCTION PERIOD.
- CONTRACTOR SHALL TAKE EXTRA PRECAUTIONS TO MINIMIZE DAMAGE TO TREES WHERE WORK IS DESIGNATED TO OCCUR WITHIN AND ADJACENT TO THE DRIPLINE OF TREES.
  - EXCAVATION WORK WITHIN DRIPLINE OF TREES SHALL BE LIMITED TO HAND REMOVAL, DIRECTIONAL BORING, AND AIR KNIFE ONLY TO MINIMIZE DAMAGE TO ROOT SYSTEMS.
  - WHERE WORK IS TO OCCUR WITHIN DRIPLINE OF TREES OR TREE PROTECTION ZONES, PROVIDE ROOT PRUNING.
  - PROTECT TRUNK AND BRANCHES FROM DAMAGE WHERE WORK IS DESIGNATED TO OCCUR WITHIN THE DRIPLINE.
- CONTRACTOR SHALL NOT PLACE STRUCTURES OR STORE MATERIALS IN TREE PROTECTION ZONES OR WITHIN THE DRIPLINE OF TREES. TREE PROTECTION FENCE SHALL PREVENT TRAFFIC MOVEMENT AND THE PLACEMENT OF TEMPORARY FACILITIES, EQUIPMENT, STOCKPILE, AND SUPPLIES FROM HARMING VEGETATION.

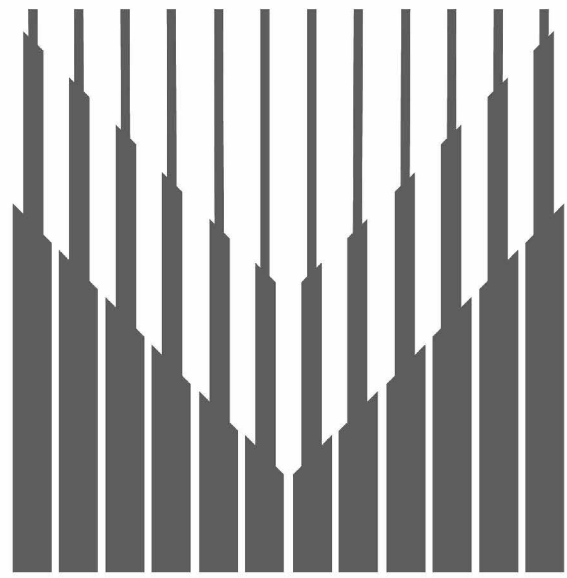
ROOT PROTECTION

- IN AREAS WHERE WORK OCCURS WITHIN DRIPLINE OF TREES AND IDENTIFIED AS ROOT PROTECTION ZONES, CONTRACTOR SHALL USE EXTRA PRECAUTION TO MINIMIZE DISTURBANCE TO ROOTS DURING CONSTRUCTION ACTIVITIES.
- PROVIDE PROTECTIVE 4" ORGANIC WOOD MULCH LAYER BENEATH AND AROUND CONSTRUCTION AREAS, CLEAN ROOT CUTTINGS BY ISA CERTIFIED ARBORIST, AND LOW-IMPACT EXCAVATION MEASURES.
  - DISTURBED MULCH SHALL BE REPAIRED IMMEDIATELY.

TREE PROTECTION FENCING



- NOTES:
- PROTECTIVE FENCING TO BE INSTALLED MINIMUM 6' FROM TREE DRIPLINE.
    - DRIPLINE CONSIDERED AREA DIRECTLY BELOW TREE CANOPY.
  - INCLUDE CLEAR SIGNAGE ON EXTERIOR OF FENCING INDICATING THE TREE PRESERVATION AREA.
  - WHEN WORK IS REQUIRED WITHIN FENCE AREA:
    - PLACE MIN. 4" DEPTH ORGANIC WOOD MULCH.
    - AVOID DISTURBANCE WITHIN CRITICAL ROOT ZONE. CRITICAL ROOT ZONE SHALL BE MEASURED FROM TRUNK OUTWARD AND CALCULATED AS FOLLOWS:
      - DBH < 20" USE 1 FOOT RADIUS PER 1 INCH DBH; MIN 3' RADIUS.
      - DBH > 30" USE 1.5 FOOT RADIUS PER 1 INCH DBH.



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1022 Lakeshore Dr.  
Ashland, WI 54806  
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PRELIMINARY NOT  
FOR CONSTRUCTION

REVISIONS

| No. | Description | Date   |
|-----|-------------|--------|
| 1   | Revision 1  | Date 1 |
|     |             |        |
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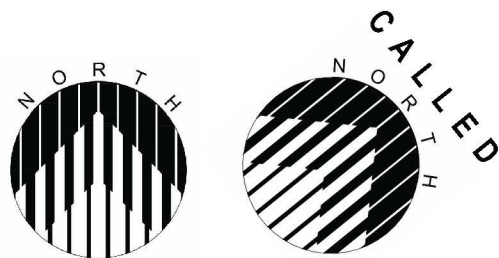
US INTERNET  
ROBBINSDALE CO  
BUILDING

3819 WEST BROADWAY  
ROBBINSDALE, MN  
LANDSCAPE PLAN

PROJECT NUMBER 24-033  
DATE 01/08/25  
DRAWN BY LFM  
CHECKED BY TLM

A1.2

1 LANDSCAPE PLAN  
1" = 20'-0"





Member \_\_\_\_\_ moved and Member \_\_\_\_\_ seconded a motion that the following resolution be read and adopted this XX day of month 2025.

**RESOLUTION NO.**

**A RESOLUTION APPROVING VARIANCE REQUEST V25-1 TO ALLOW A BUILDING TO BE SETBACK 30 FEET FROM THE REAR YARD PROPERTY LINE AT 3819 WEST BROADWAY**

**WHEREAS**, the applicants US Internet want to setback their building 30 feet from the front yard property line that requires a variance; and

**WHEREAS**, the Planning Commission conducted a public hearing on February 20, 2025 and adopted a motion recommending approval of the variance request based upon the following findings of fact:

- a. That the property is in the mixed-use area and therefore consistent with the Robbinsdale 2040 Comprehensive Plan;
- b. That this setback allowance will provide additional security to the building;
- c. That the property only has half of it within the Transit Overlay District;
- d. That this setback distance will mirror neighboring properties along the southern half of West Broadway; and

**WHEREAS**, the Council accepts these findings:

**NOW THEREFORE, BE IT RESOLVED**, by the City Council of the City of Robbinsdale, Minnesota, that Variance request V25-1 to allow a 30-foot setback for a non-residential building at 3819 West Broadway (legally described in Attachment C) pursuant to Section 530.09 Subd.3 and 535.05 is hereby approved.

The question was on the adoption of the resolution and upon a vote being taken thereon, and the following voted in favor thereof:

And the following voted against the same:

WHEREUPON SAID RESOLUTION WAS DECLARED DULY PASSED AND ADOPTED THIS XX DAY OF MONTH 2025.

\_\_\_\_\_  
Bradley Sutton, Mayor

Attest:

\_\_\_\_\_  
Chase Peterson-Etem, City Clerk

City of Robbinsdale

Public Hearing Notice

**NOTICE IS HEREBY GIVEN** that there will be a Public Hearing of the Planning Commission of the City of Robbinsdale, Minnesota on **Thursday, February 20th, 2025, at 7:00 p.m.** for consideration of a Variance application for 3819 West Broadway. The Variance request is looking for leniency from our Transit Overlay Districts setback and window glazing requirements. The meeting will be held in the City Council Chambers at Robbinsdale City Hall, 4100 Lakeview Ave. N, Robbinsdale MN 55422.

Any and all persons desiring to be heard shall be given an opportunity at the above stated time. Residents seeking further information on the public hearing should contact Assistant Planner Will Bucheger at 763-531-1269 or [wbucheger@robbinsdalemn.gov](mailto:wbucheger@robbinsdalemn.gov).

By: Will Bucheger, Assistant Planner



TO: Planning Commission

PREPARED BY: Heather Rand, Community Development Director

DATE: February 20, 2025

RE: Zoning Text Amendment

---

**Background:**

Robbinsdale has need of updating its city ordinances to provide zoning guidance for adult-use cannabis and low-potency hemp product businesses scheduled for possible state licensing in mid to late 2025.

In May of 2024, the state of Minnesota approved the legalization of adult-use cannabis and low potency hemp edible businesses to begin legally operating in the state. The state legalization of the industry requires first, the creation of the state's Office of Cannabis Management (OCM), and its establishment of state regulations and a regulatory framework for the state to issue cannabis business licenses and enforce the new regulations.

Presently, the OCM is newly created and scheduled to adopt state regulations and begin issuing cannabis business and lower-potency hemp edibles business licenses sometime in mid-2025. While Minnesota Statute (M.S.) directs the state OCM to issue these business licenses, M.S. 342.13 allows local units of government such as cities, to adopt reasonable restrictions of the time, place, and manner of the operation of a cannabis business, provided such restrictions do not prohibit the establishment or operation of the cannabis businesses. M.S. 342.22, allows for local government registration and enforcement of state-licensed cannabis retail businesses and lower-potency hemp edible retail businesses. Lastly, M.S. 462.357 provides local units of government the authority to adopt zoning ordinances to direct and guide land use at the local level.

So, in sum, cities may not license the new adult-use cannabis businesses, but cities may register the businesses, establish limitations on time, place and the manner of the business operation, cities may enforce the regulations and requirements of the state license, and cities may apply land use guidelines via the adoption of city land use zoning codes.

In 2022, the city of Robbinsdale adopted an ordinance allowing retail sale of low-potency hemp consumable cannabinoid products often referred to as THC products, in response to the state legalizing the sale of such. This city ordinance required the retail sale of the lower-potency hemp THC product to occur in all commercial zoning districts in the city except the B-1, neighborhood commercial business zoning district. The logic behind this zoning was to treat the zoning of the retail sale to adults of such low-potency hemp products the same as the retail sale of tobacco and liquor products, i.e. allowed in B-2 (Limited Community Business), B-3 (Highway Commercial), B-4 (Community Business) and DD1/DD2 (Downtown Business Districts 1 and 2), but not B-1(Neighborhood Business) district.

**Analysis:**

Robbinsdale city code states in Chapter V, Section 520.01, Subdivision 1. Purpose for B-1, Neighborhood commercial business district as:

A district to provide for the establishment of local centers for convenient, limited retail or service

outlets not larger than 5,000 square feet of gross floor area, which deal directly with customers for whom goods and services are furnished. These centers are to provide services and goods only for the surrounding neighborhoods and are not intended to draw customers from the entire community.

For the purpose of updating the city's zoning code ordinance in keeping with the state's intended legalization and issuance of licenses for adult-use cannabis retail sales and the sales of lower-potency hemp edible products, and other cannabis businesses, it is recommended that the follow text amendments be made to the city's zoning code.

## 1. Cannabis Retail Business and Lower-Potency Hemp Edible Retail Businesses

Chapter V, Section 520.03. B-2 limited commercial district. Subd. 2. Permitted uses. Permitted uses in a B-2 district are:

(x) ~~cannabis retailers and restaurant establishments that sell THC products, as defined in city code subject to licensing requirements of section 1160 of the City Code~~ **cannabis retail business and lower-potency hemp edible retailer business with a license from the state of Minnesota Office of Cannabis Management.**

Chapter V, Section 521.01. DD-1 -downtown district.

Subd. 2. Permitted uses. The following are permitted uses, up to 10,000 square feet gross square area, in the downtown district:

( a ) retail uses including, but not limited to, the sale of hardware, paint and wallpaper, meat market, bakery, grocery food items, gifts, flowers, drug store/pharmacy, books, hobby supplies, jewelry, antiques, new wearing apparel, pets and pet supplies, marine tropical fish sales and service, ~~cannabis retailers and THC products, as defined in City Code~~ **cannabis retail businesses and lower-potency hemp edible retail businesses** and craft shops making articles exclusively for sale at retail on the premises.

( c ) food retail services including, but not limited to, restaurant, delicatessen, coffee shop, ice cream shop, ~~THC products, as defined in City Code subject to licensing requirements of section 1160 of the City Code~~, convenience food establishments, including those establishments that provide drive-through window service.

Chapter V, Section 521.03. DD-2 – Downtown transition and transit district.

Subd. 2. Permitted uses. The permitted uses in the DD-2 district are:

(a ) retail uses including, but not limited to, the sale of hardware, paint and wallpaper, meat market, baker, grocery food items, gifts, flowers, drug store/pharmacy, books, hoppy supplies, jewelry, antiques, wearing apparel, pets and pet supplies, marine tropical fish sales and services, **cannabis retail businesses and lower-potency hemp edible retail businesses** and craft shops making articles exclusively for sale at retail on the premises.

## 2. Other Cannabis and Low Potency Hemp Edible Businesses involved in cultivating, manufacturing, testing and wholesale distribution and transportation of related products.

The 2024 change is state legislation also allows for the legalization and state licensing of cannabis businesses such as Cannabis Cultivation Business, Cannabis Manufacturing Business,



Cannabis Testing Business, Cannabis Transporter Business, Cannabis Wholesaling Business, and Lower-Potency Hemp Edible Manufacturer Businesses. To guide for the land use zoning of these of potential new business uses in the city, it is recommended the city's zoning code ordinance be updated to provide for such in the city's Business Warehousing District (BW).

While the city currently does not have any parcels in the city zoned BW, the city's comprehensive plan does provide land use guidance for a few locations in the city as future Utility/Industrial land uses (see attached comprehensive land use map).

So, following the guidance of the city's comprehensive plan, it is recommended that for one of these types of businesses to locate in the city, the city council would have to approve a rezone of a land parcel to BW with a 4/5 vote. To update the city's land use ordinance for such potential use, the following language in bold, would need to be added to City Code:

Robbinsdale Code Chapter V Section 525.01. B-W, Business-warehouse district.

Subdivision 1. Purpose. A district to provide for the establishment of wholesale retail trade, large volume or bulk commercial items, warehousing, and light industry or processing.

Subd.2. Permitted uses. Permitted uses in a B-W district are:

**( r) State licensed Cannabis Cultivation Business, Cannabis Manufacturing Business, Cannabis Testing Business, Cannabis Transporter Business, Cannabis Wholesaling Business, and Lower-Potency Hemp Edible Manufacturer Businesses.**

Minimum Buffer RequirementsState statute allows local units of government to adopt buffer requirements that may prohibit the operation of a state licensed cannabis or low-potency hemp edible business within certain distances of schools. State law further states that a jurisdiction such as a city, may not limit the number of retail cannabis businesses to less than 1 state licensed, city registered per 12,500 residents. As such, the city of Robbinsdale may limit the overall number of registered retail cannabis businesses to 2, but not less than 2. Given the city is fully developed with a limited number of parcels zoned to accommodate retail business, it is recommended that the city adopt a modest buffer that prohibits retail cannabis businesses from being located within 300 feet of a school. Buffers greater than this will likely not provide adequate sites to operate in the city. To further illustrate this, please refer to the attached draft buffer maps.

To establish the buffer for retail cannabis and low potency hemp edible products in the city of Robbinsdale, it is recommended the follow text be added to Robbinsdale city code in a new section of code that will delineate requirements for the city to register the state licensed cannabis businesses and enforce compliance with state law.

## **Robbinsdale Code Chapter X**

### **Section xxxx**

**The city of Robbinsdale shall prohibit the operation of a state licensed cannabis business within 300 feet of a school.**

### **PUBLIC HEARING:**

Notice of this public hearing was published in the city's official newspaper and posted on the city's bulletin board 10 days prior to this meeting. City staff have received no inquiries from residents at the time of this report.

### **Recommendation:**

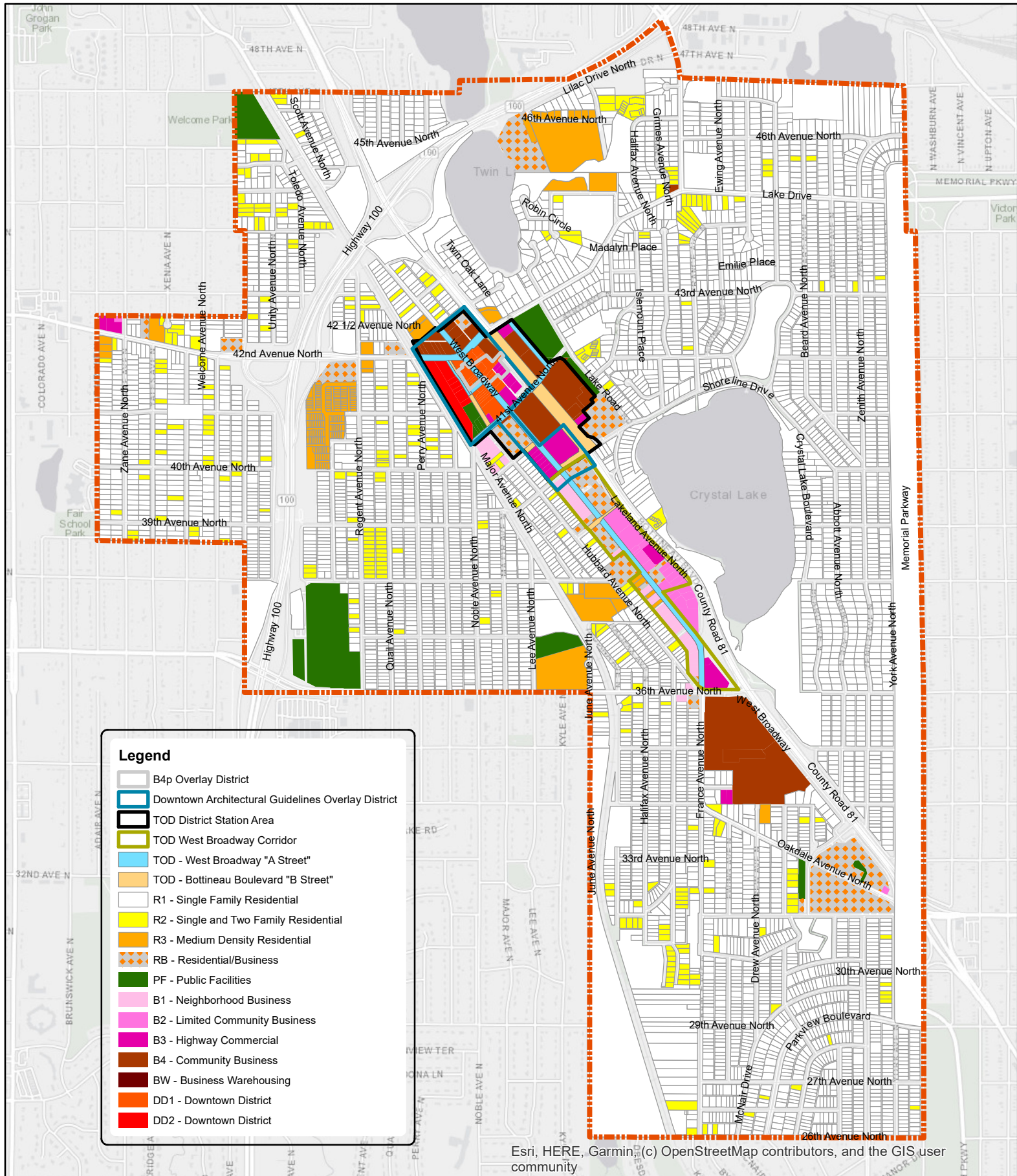
1. Hold the public hearing.
2. Motion to recommend that the City Council approve the proposed zoning text changes

pertaining to state licenses cannabis and lower-potency hemp edible businesses in the city as presented.

**Attachments:**

1. Attachment A - Robbinsdale Zoning Map
2. Attachment B - Comprehensive Plan Map
3. Attachment C - Buffer Maps
4. Attachment C - Buffer Maps
5. Attachment D - Public Hearing Notice





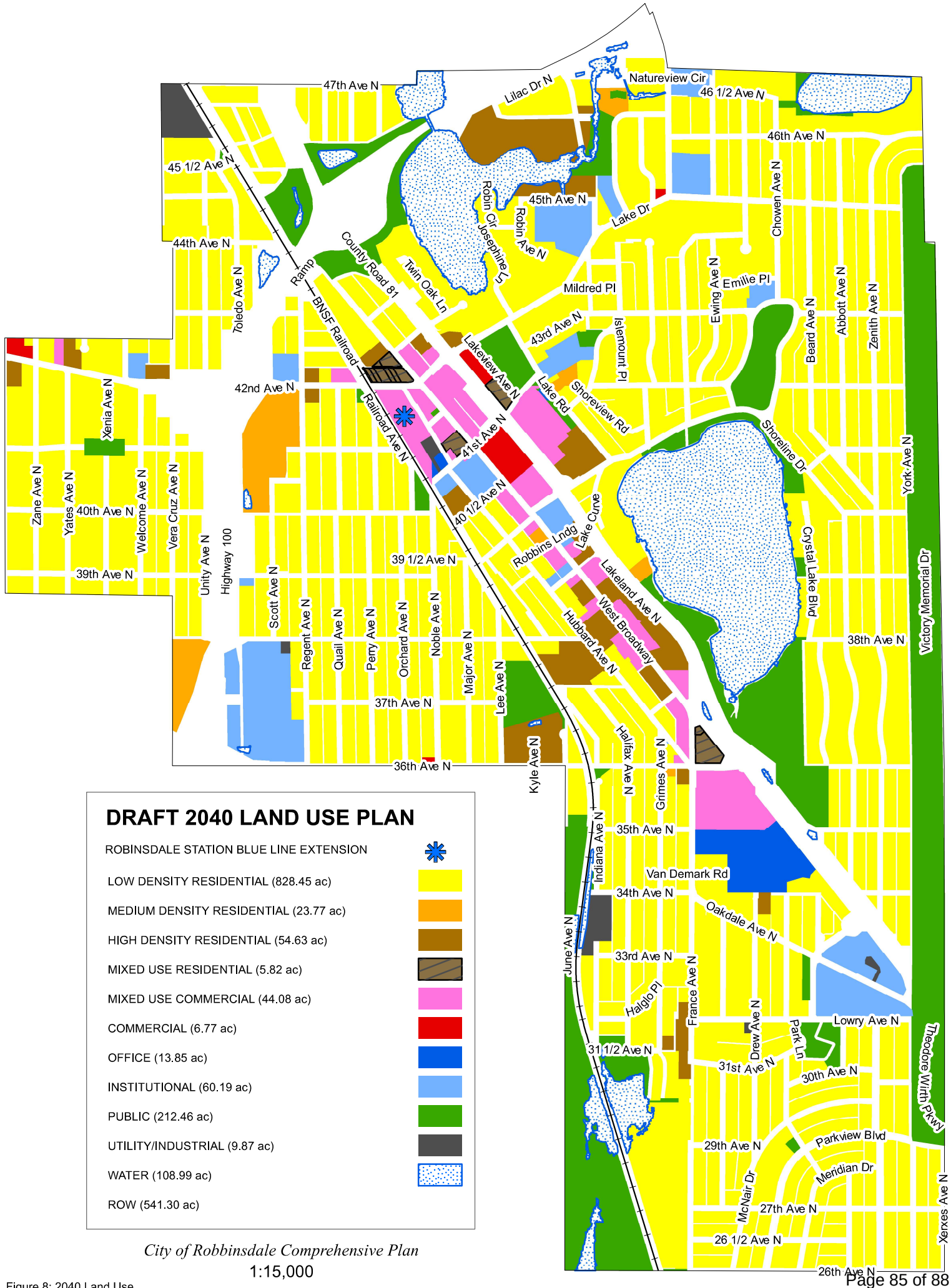
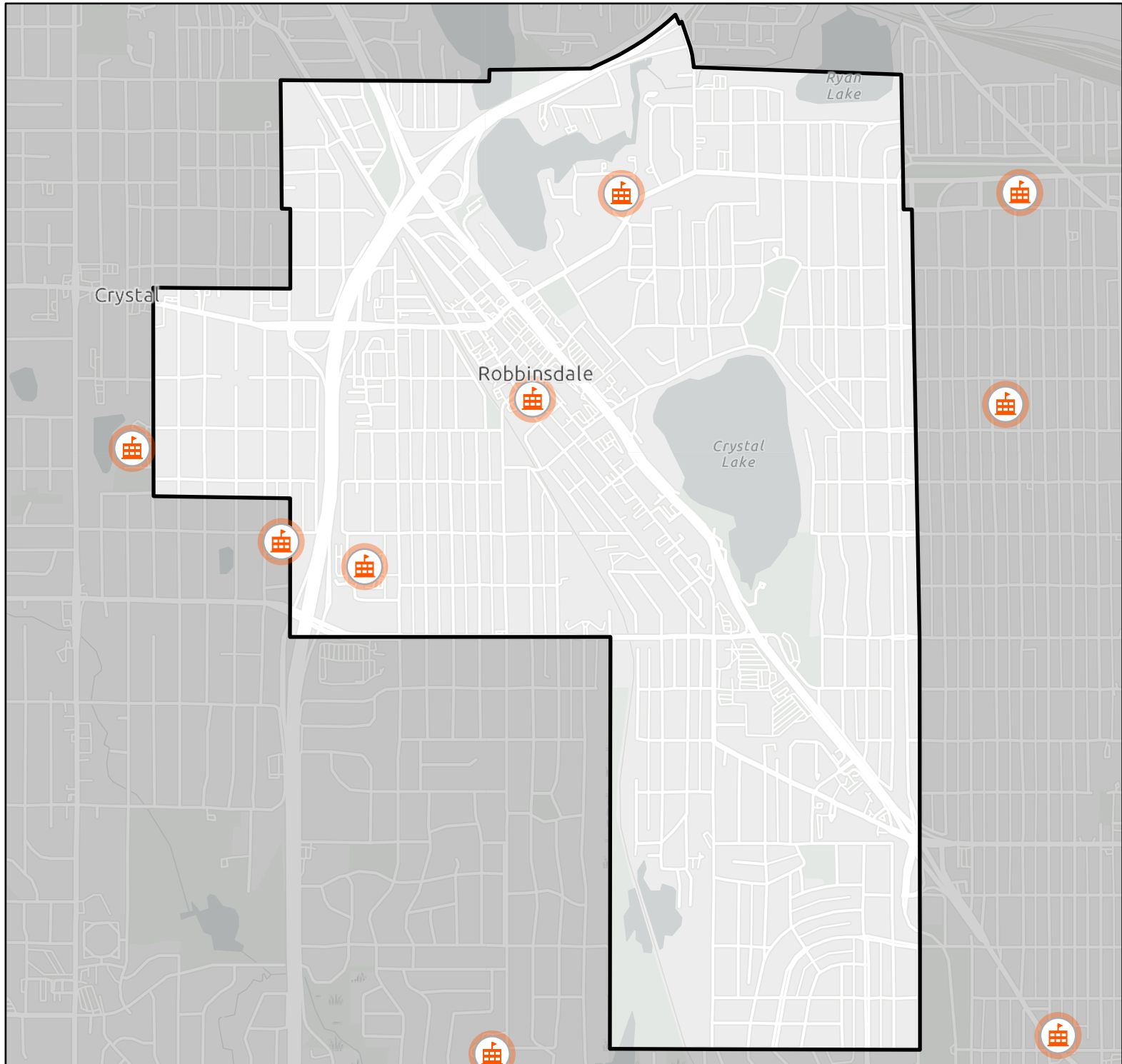


Figure 8: 2040 Land Use



# Proposed Zoning Restrictions for Cannabis Businesses

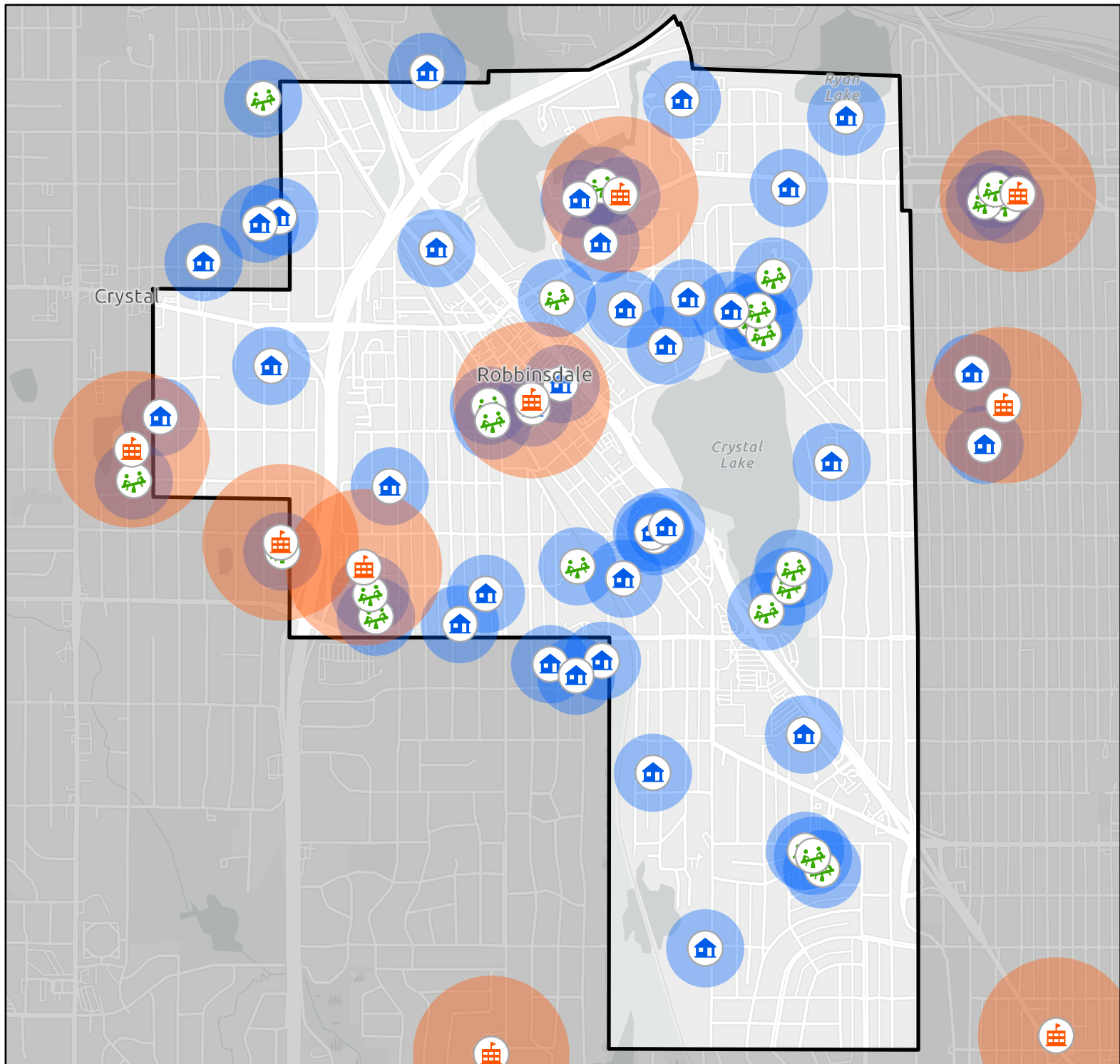


-  Schools
-  300 foot buffer

0 0.25 0.5 1 Miles



# Proposed Zoning Restrictions for Cannabis Businesses



-  Schools
-  Playgrounds and Athletic Fields
-  Daycares and Residential Treatment Facilities
-  500 foot buffer
-  1000 foot buffer



City of Robbinsdale

Public Hearing Notice

**NOTICE IS HEREBY GIVEN** that there will be a Public Hearing of the Planning Commission of the City of Robbinsdale, Minnesota on **Thursday, February 20th, 2025, at 7:00 p.m.** for consideration of city ordinance text changes pertaining to the zoning requirements of state licensed adult-use cannabis businesses. The meeting will be held in the City Council Chambers at Robbinsdale City Hall, 4100 Lakeview Ave. N, Robbinsdale MN 55422.

Any and all persons desiring to be heard on this matter, shall be given an opportunity at the above stated time. Residents seeking further information on the public hearing should contact Assistant Planner Will Bucheger at 763-531-1269 or [wbucheger@robbinsdalemn.gov](mailto:wbucheger@robbinsdalemn.gov).

By: Will Bucheger, Assistant Planner