



Special Use Permit Staff Report

To: City of Dickinson Planning and Zoning Commission
 From: City of Dickinson Planning Department
 Date: January 10, 2023
 Re: SUP-001-2024 Robertson Metal Recycling Heavy Industrial Use for a Car Shredder

OWNER/APPLICANT

Reginald Robertson
 Robertson Metal Recycling, LLC
 216 Highway 12 East, PO Box 1236,
 Hettinger, ND, 58639
 reggie@robertsonmetal.com
 (701) 567-2568

Public Hearing	January 17, 2024	Planning and Zoning Commission
Final Approval	January 23, 2024	City Commission

EXECUTIVE SUMMARY

Description: To consider a request to issue a Special Use Permit for a Heavy Industrial Use to allow an "American Pulverizer" 80 X 104 ft hammermill (metal shredder) to be installed and operated on a property legally described as Lot 6, Block 2, Energy Center 1st Subdivision in the W1/2 of Section 1 and N1/2 of Section 12, T139N, R96W, Stark County, North Dakota. The site consists of +/- 2.9 acres. This property is located within the City of Dickinson. The purpose of the equipment is to process car bodies and farm/industrial scrap.

Public Comments: None.

Staff Recommendation: Staff recommends that *if* Planning & Zoning moves to approve SUP-001-2024, the following conditions be attached:

- The Special Use Permit runs with the land and requires an annual compliance review.**

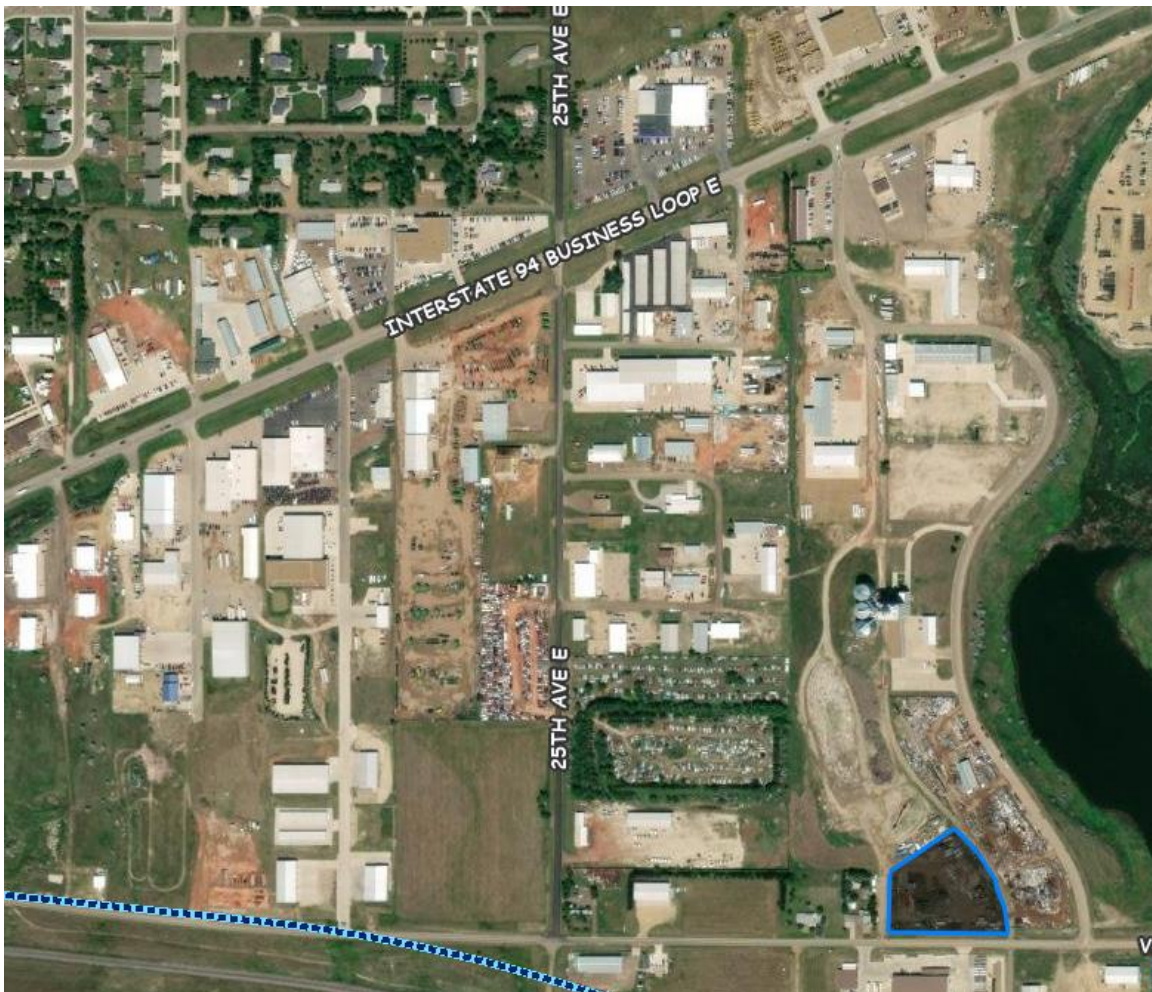
2. Nuisance complaints against the operations, including those relating to noise, vibration, odors, traffic, urban services, will be recorded as part of the annual review of the Special Use Permit. Staff will report any significant findings of nuisance to the Planning & Zoning Commission to consider revocation of the Special Use Permit.

LOCATION

Legal Description:

The property proposed for this Special Use Permit is legally described as Lot 6, Block 2, Energy Center 1st Subdivision in the W1/2 of Section 1 and N1/2 of Section 12, T139N, R96W, Stark County, North Dakota. The site consists of +/- 2.9 acres. This property is located within the City of Dickinson. The subject parcel is generally located south of the East Business Loop, roughly ¼ mile east of the intersection of Villard Street E and 25th Ave E.

General Location:



CURRENT ZONING	GI
FUTURE LAND USE MAP DESIGNATION	Industrial
GROSS SITE ACREAGE	2.9 acres
LOTS PROPOSED	N/A

NEARBY ZONING & LAND USE		
Direction	Zoning	Land Use
North	GI	Varied secondary-sector industrial uses. Long-term storage of equipment, vehicles, materials, miscellaneous industrial products.
East	GI	Long-term storage of equipment, materials, waste. Regional detention pond.
South	GI	Varied secondary-sector industrial uses. Long-term storage of equipment, vehicles, materials, miscellaneous industrial products.
West	GI	Varied secondary-sector industrial uses. Long-term storage of equipment, vehicles, materials, miscellaneous industrial products. Three legally-non-conforming residential parcels.

STAFF ANALYSIS & RECOMMENDATION

An existing scrap operation is located on the subject property. The addition of the equipment as described in the attachments necessitates approval of a special use permit for a heavy industrial use because without proper measures, the potential for noise complaints, vibration complaints, and explosions may greatly increase within the general vicinity.

Documentation provided by the applicant within attachments entitled *Acoustibloc Sound Suppression, Letter to City of Dickinson, and Geotechnical and Engineering Drawings*, narrate the

applicant's measures taken to address potential public confrontations, hazards, and quality-of-life nuisance (noise, vibration, smell, fumes).

The applicant has also addressed various other concerns communicated at the Pre-Application Meeting on November 2, 2023. Topics mentioned include electricity usage, nuisances, screening, traffic impacts, and preservation of pavement quality (assurance of low truck volume). The applicant has also provided a *Letter to City of Dickinson* (Attachment A), which explains the measures they have taken to reduce noisome effects.

According to that letter, the applicant has incorporated the following measures:

- All fluids and contaminants will be removed before being induced in the shredded
 - Thorough inspection of materials prior to shredding
- Sound suppression will be accomplished by use *Acoustibloc* sound suppression barriers (Attachment A)
- Approval from Roughrider Electric Cooperative to consume 8,500 KVA
- Screening measures for vibrations and sound
 - Pre-ordered *Acoustifence* to erect a sound barrier 40 feet high around the shredder box
 - A 20 ft tall steel fence to be erected around Lot 6, where the shredder will be located
- Traffic on site is not expected to generally exceed 5 trucks per day. Materials will be moved primarily within the yard and exit by railroad.
- Approached residential neighbors (within G1 zoning) to purchase the properties but have been turned down.

A heavy industrial use is described in Section 39.03.009 of the City Zoning Ordinance as follows:

g. Heavy Industry-Enterprises involved in the basic processing, storage, and manufacturing of products, predominately from raw materials, with noticeable noise, odor, vibration, or air pollution effects across property lines; or a use or process engaged in the storage of or processes involving potentially or actually hazardous, explosive, flammable, radioactive, or other commonly recognized hazardous materials.

Regarding Vibrations Limits:

According to the *Journal of Preservation Technology*, people begin to perceive vibration at around 0.005 in/sec peak particle velocity (PPV).^[2] The longer a vibration of a given peak velocity lasts,

the more disturbing people find it.^[3] Construction literature suggests that the damage probability is higher for a given ground vibration PPV associated with construction work than for the same PPV velocity associated with blasting.^[24]

* The applicant suspects limited incidents of propane tank explosions, as indicated in the transmittal letter. Staff does not recommend establishing a numerical threshold regarding explosion frequency. Instead, staff recommends submitting any complaints filed against the applicant to be attached to the annual Special Use Permit review.

Regarding Decibel Limits:

According to Section 24.12 Noise Levels—Zoning Districts;

"It shall be unlawful to project a sound or noise, excluding noise emanating from a motor vehicle, from one property into another or within the boundary of a use district, which exceeds the limiting noise criteria set forth in Table 1..."

Table 1. establishes industrial zoning dB limits as such:

7:00 a.m. – 11:00 p.m.	80dB
11:00 p.m. – 7:00 a.m.	75dB

The above table is based upon average daily operational noise. Because the land use described by the staff report may cause blasting-type noise in addition to a static source, code enforcement may need to rely on subjective disturbance criteria, on a complaint-by-complaint basis, dependent upon the observations and testimony of witnesses and/or a code enforcement officer. As described within the recommended conditions for approval, such complaints would be recorded and attached to the annual review, informing future recommendations to the Planning & Zoning Commission regarding potential revocation of the Special Use Permit.

Compatibility with Local Uses

Staff cannot guarantee compatibility with adjacent General Industrial- zoned properties; heavy industrial uses require special use permits because they may exceed duly established limitations to industrial intensity within the ETZ. However, if the Planning & Zoning and City Commissions approve of this land use, there are likely very few comparatively better locations which could be chosen within the ETZ. The subject property is embedded within the GI zoning district, as exhibited by the attached zoning map (Appendix B).

Compliance with Zoning and Subdivision Regulations

If approved, the subject parcel will comply with requirements as set forth by Articles 39 Zoning and 34 Subdivision. According to Table 4-2, Heavy Industry within the General Industrial zoning district requires approval of a special use permit.

Public Input

Staff has received comments from one individual which has been added to attachments. Staff has contacted the manufacturer to request clarification regarding the claims submitted by the individual.

Staff Recommendation

City Staff lacks information necessary to recommend either approval or denial. The proposed land use would satisfy all of the municipal code's basic requirements to apply for a special use permit within a GI zoning district. Staff lacks the necessary empirical basis to recommend approval because the local economic impact is indeterminable and the conclusions pertaining to equity may be highly subjective.

Local economic benefit generated by this enterprise may affect a relatively small number of local employees/residents, as the service collects regional material, processes it, and discharges it. While providing a link within an industrial process, this site appears to serve as a staging ground but primarily provides a service to extant communities. To the extent that service is utilized locally, it may or may not justify the alteration to quality of life in the area. As an economic impact consideration, relative to the size of the potential quality of life impact, staff concludes the outcome is probably neutral or detrimental.

There is likewise no empirical basis to recommend denial because the potential for nuisance is not fully understood. The nearby residents have submitted prior complaints and the applicant has unsuccessfully attempted negotiating the purchase of that residential property. That residence was first constructed in 1927.

If a special use permit is to be approved for this use within City limits, this location would be generally favorable compared to other areas. Therefore, Planning & Zoning might first determine if this is a land use desired within city limits at all and then decide whether approval is fair to the adjacent residential development, which preceded this General Industrial zoning district.

If the Board votes to approve this application, Staff proposes approval subject to the following conditions.

- 1. The Special Use Permit runs with the land and requires an annual compliance review.**
- 2. Nuisance complaints against the operations, including those relating to noise, vibration, odors, traffic, urban services, will be recorded as part of the annual review of the Special Use Permit. Staff will report any significant findings of nuisance to the Planning & Zoning Commission to consider revocation of the Special Use Permit.**

Matthew Galibert, City Planner



*****Approval*****

I move the City of Dickinson Planning and Zoning Commission recommend Approval of **SUP-001-2024** Robertson Metal Recycling, LLC Special Use Permit, subject to the conditions above, as meeting all the requirements of the Dickinson Municipal Code and also being in the interest of the public health, safety and welfare.

(AND) the following additional requirements **(IF THE PLANNING AND ZONING COMMISSION RECOMMENDS ANY ADDITIONS AND/OR DELETIONS TO THE PROPOSED MOTION LANGUAGE)**:

1. _____;
2. _____.

*****Denial*****

I move the Dickinson Planning and Zoning Commission recommend Denial of **SUP-001-2024** the Robertson Metal Recycling, LLC Special Use Permit petition as NOT meeting all the requirements of the Dickinson Municipal Code and as being contrary to interest of the public health, safety and welfare.

APPENDICES


Appendix A. References

1. *Vibration Limits for Historic Buildings and Art Collections*, Arne P. Johnson and W. Robert Hannen, *Journal of Preservation Technology*, 46:2-3, 2015, pp 66.74
2. *Structure Response and Damage Produced by Ground Vibration From Surface Mine Blasting*, D.E. Siskind, M. S. Staff, J. W. Kopp, and C. H. Dowding, United States Bureau of Mines Report of Investigations 8507 (USBM RI 8507), 1980, p. 62, *et seq.*
3. *A qualitative estimate of the damage probability*, applicable to the Swiss standards for construction vibration damage, has been published: "For peak particle velocities twice as high as the given guide values damage is to be expected." *Swiss Standard for Vibrational Damage to Buildings*, J. Studer and A. Susstrunk, *Proceedings, X. Int. Conf. ISSMFE, Stockholm, Vol. 3.*, p. 308 (1981).
(U.S. FTA adopts the same Swiss numerical limits. A scientific paper on the Swiss standards indicates that damage is "to be expected" when the vibration level is at twice the Swiss limit. Thus, those who use the OSM standard for construction situations, at nearly four times the Swiss limit for construction. This may go a long way toward explaining why damage commonly occurs when people try to apply blasting vibration standards in non-blasting construction situations.)

Appendix B. Zoning Map



Zoning Classification

	Planned Unit Development - PUD
	Community Commercial - CC
	Downtown Commercial - DC
	General Commercial - GC
	Limited Commercial - LC
	General Industrial - GI
	Limited Industrial - LI
	Low Density Residential - R1
	Medium Density Residential - R2
	High Density Residential - R3
	Rural Residential - RR
	Mobile Home - MH
	Public - P
	Agricultural - AG

ATTACHMENTS

- *Letter to City of Dickinson*
- *Acoustibloc Sound Suppression Brochure*
- *Geotechnical and Engineering Drawings*