



**Bldg. 5 and Bldg. 6 / Warehouse Buildings
Rezoning Request & Project Narrative
4558 E. Virginia St.
Mesa, Arizona 85215
January 14, 2019**

Project Summary & Request -

Weiss Magness Architects, Inc., on behalf of Daicel/DSSA AZ (DSSA AZ) hereby submits this project narrative and supporting documents in support of a zoning change request on the approximate 19.6 acres located at 4558 E. Virginia, which is east of the northeast corner of Virginia Street and Greenfield Road in Mesa, Arizona and is commonly known as APN 141-37-050A. The specific request is to rezone the 19.6 acres from Heavy Industrial (HI) to Heavy Industrial (HI) with a Planned Area Development (PAD) overlay.

The current DSSA AZ facility was established in 2015 and operates in the Heavy Industrial (HI) zoning district for the manufacture of precision engineered energetic devices critical to the successful deployment of automotive safety systems. According to the City of Mesa Zoning Code, this facility qualifies as a "Hazardous Material Facility."

This narrative is presented to satisfy the Planning and Zoning submittal requirement for rezoning of this parcel to allow the proposed expansion and is intended to accompany the following exhibits:

1. SP1.0 - "DSSA AZ Overall Site Plan", dated 1/14/2019;
2. SP1.1 - "Enlarged Building 5 Site Plan", dated 1/14/2019;
3. SP2.0 - "Overall Building 5 Floor Plan and Section", dated 1/14/2019;
4. SP2.1 - "Overall Building 6 Floor Plan and Section", dated 1/14/2019;
5. SP4.0 - "Building 5 Exterior Building Elevations", dated 1/14/2019;
6. SP4.1 - "Building 6 Exterior Building Elevations", dated 1/14/2019;
7. C1.1 - "Conceptual Grading and Drainage Plan", dated 1/14/2019;
8. C1.2 - "Conceptual Grading and Drainage Plan", dated 1/14/2019;
9. PL1 - "Preliminary Landscape Plan", dated 1/14/2019.

Daicel/DSSA AZ Operational Information-

Daicel is a world leader in the development and manufacturing of precision-engineered pyrotechnic products. Daicel, owners of the DSSA AZ-Mesa facility, located at 4558 E. Virginia Street, opened in 2014 initially to supply inflators for driver and passenger-side occupant restraints (airbags).

Daicel/DSSA AZ Inc. continues to reaffirm a strong commitment to meet or exceed health and safety regulations. The Daicel/DSSA AZ-Mesa team strives to maintain an exceptional work place by working closely with regulatory agencies and continuously refining safety activities. The DSSA AZ-Mesa team maintains a working relationship with the Arizona Division of Occupational Safety and Health (ADOSH) and participates in ADOSH sponsored training opportunities, reviews and audits on a regular schedule.

Overview-

In 2014, Daicel/DSSA AZ Inc. was presented with an opportunity to expand production capabilities with an automotive airbag inflator facility to meet the current critical and future inflator needs of the automotive industry. In response, a new $\pm 100,000$ SF inflator manufacturing facility was designed and constructed on this 19.6-acre parcel. Construction was completed in 2016 and is currently in operation. Building on the success of this recent project, Daicel/DSSA AZ, is proposing to design and construct new warehouse buildings to further expand their storage capabilities and allowing more manufacturing opportunities. Daicel/DSSA AZ, is committed to following and refining the same systems, models and safety techniques used previously to ensure this facility expansion can be constructed and operated in a completely safe and timely manner.

To further increase on-site storage capacity necessary to accommodate rising business demands for finished product, DSSA AZ plans to construct the Building 5 warehouse structure (23,400 sq. ft./ 36'-6" tall / Type II-B, S-1 occupancy) located at the northwest corner of the existing site, which will be followed in the near future by the Building 6 warehouse structure (20,200 sq. ft. / 36'-6" tall warehouse / Type II-B, S-1 occupancy) located at the northeast corner of the existing site (see SP1.0). The proposed use of the buildings is consistent with the uses allowed for the current HI zoning and will accommodate semi-truck shipping and receiving operations to facilitate the high-piled storage of inert materials to support the manufacture of automotive airbag inflators.

Currently, DSSA AZ transports, stores, and ships their finish goods product from off-site facilities. If approved, this request will allow new building expansions to occur and provide additional on-site storage/shipping space necessary to support the increased production demands at the existing DSSA AZ facility, and the capability for an on-site storage facility provides a more, controlled, secure, safer, and efficient operation.

In addition, the proposed and future warehouse structures would also offer DSSA AZ the ability to increase their automotive air bag inflator production capabilities with the installation of new production lines. These lines are planned to be located where the existing DSSA AZ warehouse facility currently resides in Building "1A". Existing warehouse operations would be displaced by

the production lines, and relocated to either of the proposed warehouse expansion buildings.

Adjacent Zoning Districts and Existing Uses -

The adjacent zoning districts and land uses are illustrated below in the following table:

Direction	Current Zoning	Mesa 2025 General Plan	Current Use
North	202 Freeway	GI	202 Freeway
South	LI	GI	Industrial Warehouse
East	GI (CUP)	GI	Industrial Use (Existing SDI Facility)
West	GI	GI	Industrial (Arizona Stone)
Project Site	HI	GI	Heavy Industrial Use (Existing DSSA AZ Facility)

As indicated in the chart above, the change from HI to HI PAD will maintain the compatible uses and zoning between the subject site and the properties to the north, east and west while allowing the flexibility of this development as a cohesive unit. The proposed change is also consistent with the existing and proposed General Plan.

PAD Requirement Compliance-

The existing parcel currently zoned as Heavy Industrial (HI) can comply with the requirements for a Planned Area Development (PAD) Overlay in accordance with the following:

- a. Site Area- The minimum site area for a PAD is 5 acres. The size of the DSSA AZ site is 19.6 acres.
- b. Development Standards- The existing facility and the proposed expansions comply with the general development standards regulated by the Mesa Zoning Ordinance except for the proceeding request to modify building setbacks along the north property line for the proposed Building 5 and future Building 6 locations (See "Siting").
- c. Land Use- The proposed Building 5 and future Building 6 expansions are office/storage/warehouse uses allowed in HI zoning. Storage/Warehouse use had previously been established and occurs in the existing facility in Buildings 1A, 2, 3, and 4. Office and manufacturing uses also occurs in existing Buildings 1A, 1B, 1C and 1D.
- d. Open Space- Use of open space is provided based on both technical and aesthetic considerations. Technically, building structure separations are provided as regulated by

the International Building and Fire Codes, providing open physical distances that allow safe operations, where the use of energetic material is used or stored., from surrounding exposures. This type of open space is located at the center of the site concealed from public view. Esthetically, the majority of the existing open space has been provided along the Virginia Street frontage where it is accessible from public view. The open space is integrated with the building structure and parking by means of landscape, hardscape, patios, and shade structures to provide a pleasant visual backdrop to the street frontage.

- e. Street Access- A new private road will provide vehicular, waste disposal, fire truck, and internal plant access. The road extends north from the existing west parking lot which provides access to Virginia Street.

Siting-

The proposed and future warehouse building locations are mainly influenced by their ability to, 1) achieve vehicular and fire truck access, 2) maintain the existing site storm water retention concept, 3) maintain quantity/distance separation from existing energetic material storage magazines (Buildings #2, #3, and #4), and 4) provide ample fire separation distance from the north property line.

DSSA AZ utilizes HD 1.3 , HD 1.4 propellants (energetic materials) in-storage and flammable solids and HD 1.4 materials in-use for their production operation for the manufacture of automotive air bag inflators. These materials are stored in 3 existing stand-alone structures or magazines (Buildings 2, 3, & 4). The existing site and buildings have been designed and constructed considering the health and physical hazards imposed by the production materials. One of the code requirements, when utilizing energetic materials, is to provide quantity/distance (QD) separation relationships between different exposures. One such relevant relationship or exposure is termed as the “intra-plant distance” or “IPD”. This distance is required between any operating building and a storage magazine. Buildings 5 & 6 would be considered operating buildings and Buildings 2, 3, and 4 considered as storage magazines (see sheet SP1.0).

To maintain the existing operational storage quantities required in Buildings 2, 3, & 4, proposed Building 5 & future Building 6 must be situated at appropriate distances. A 30'-0" building setback is required along the north property line that parallels the Red Mountain Freeway based on COM Zoning Ordinance Table 11-7-3, “Minimum Setback along Property Lines or Building and Parking Areas”. This application requests that the required setback along the north property line be reduced from 30'-0" to 15'-0". Acceptance of the north property line setback reduction would allow proposed Building 5 and future Building 6 to maintain a safe quantity/distance (QD) separation dictated by the '06 IFC (International Fire Code) from the existing 3 storage magazine quantities currently utilized (see sheet SP1.0).

If a 30'-0" setback is imposed along the north property line, the quantity/distance separation from proposed Building's 5 and 6, to the adjacent energetic material storage magazines (Building's 4 and 3 respectively) is reduced to 165'-0", and the maximum allowable quantity of energetics stored in Building's 3 and 4 currently required for production operations will be significantly

reduced. Building 3 quantities reduced from 68,000 lbs. to 50,000 lbs. Building 4 quantities reduced from 73,000 lbs. to 50,000 lbs.

The requested 15'-0" setback exceeds the minimum fire separation distance requirement of 10'-0" allowing non-fire rated exterior walls for Type II-B construction governed by the '06 IBC (International Building Code).

Site grading and drainage design will direct site storm water from the building perimeter and paved areas to the existing retention basin to the south. The configuration of the existing basin will be modified to allow for vehicular and fire truck access and maneuvering while maintaining required retention volumes.

Screen walls will be provided along the north property lines to conceal all on-site storage activities. Where the building faces the existing Red Mountain Freeway to the north and adjacent vacant properties to the west, landscaped buffers will be introduced to soften the visual presence of the proposed building.

Building Design-

The architectural design for the proposed project will complement and be consistent with the existing industrial uses in the area and the current DSSA facility. The various components of the project will contain building elevations that are consistent with the City's goal for high quality development and in keeping with the surrounding industrial community (See SP4.0 and SP4.1)

Construction materials and exterior colors to match the existing construction previously permitted during Phase I (BLD2015-01239) and Phase II (BLD2016-04281) Inflator Manufacturing Facility projects.

The proposed exterior building designs will emulate some of the design elements and features inherent of the existing Inflator Manufacturing Facility (See SP4.0 & SP4.1) and will consist of:

- Painted structural bearing concrete tilt-panels with ¾" reveal scoring,
- Clear span steel roof joists (Type II-B Construction) with ESFR fire suppression system,
- Painted steel-framed canopies with metal decking,
- Painted steel framed awnings at door openings,
- Painted hollow metal man and steel coiling overhead doors,
- 2-berth recessed concrete truck ramp
- Parapet screened roof top mechanical units

Based on site limitations and accommodation of warehousing operations, the rectangular floor plan proposed allows for optimal use of the space and achieves the storage volume requirements necessary to support the intended manufacturing needs (See SP2.0 & SP2.1). In addition to warehousing operations, Building 5 will also be provided with a Receiving Area, Parts Inspection, Support Offices, CMM Room, Break Room, Restrooms, Locker Room, Janitors Closet and a Storage Mezzanine.

The use of landscaping, screen walls, exterior wall reveals and reliefs, color, along with exterior lighting are proposed to add interest along the north freeway frontage. Selected features will be carried around the building perimeter but reduced in intensity were public exposure it not a major concern.

Access & Parking-

Access to the proposed and future buildings will be provided primarily from Virginia Street. DSSA AZ will provide private, controlled access internal to the site to allow ease of secure movement between the existing and proposed facilities. This private drive is illustrated both on the proposed Overall and Enlarged Site Plans (See SP1.0 and SP1.1). The primary entrance for visitors will remain at the current existing facility. Virginia Street is classified as a minor industrial collector and can adequately handles the anticipated traffic generated from this proposed facility.

The existing south general parking area accommodates the bulk of required standard and accessible parking spaces. Due to the nature of the existing facility's operations, much of the manufacturing and storage functions require extra-ordinary large footprints to accommodate its intended uses. The actual number of employees required to operate and support the facility may not be commensurate to the parking demands as currently imposed by the ordinance.

The City of Mesa does not currently regulate parking considerations for shift change, therefore DSSA AZ was permitted to utilize the following City of Phoenix Zoning Ordinance as a guide for this condition:

"Specified Industrial Use: 1 space per 1.5 warehouse or production workers. If the facility runs more than 1 shift a day, employee count will be based on the two largest shifts and 1 space per 300 SF of administration space."

The existing west parking lot containing an additional 150 parking spaces was permitted (COM permit #PLN2016-00331) in consideration of actual employee counts and shift changes as follows:

- Buildings 1A, 1B, 1C, 2, 3, and 4 = 2 largest shifts (120 + 70) = 190 production workers / 1.5 = 127 spaces
- Buildings 1A = 8,967 SF office / 375 = 24 spaces*
- Buildings 1D = 2 largest shifts (120 + 50) = 170 production workers / 1.5 = 113 spaces

Existing required parking = 264 spaces

*adjusted from 46 to 24 based on final/actual space allocation (common use areas not included)

The proposed parking area will contain an additional 30 parking spaces in consideration of actual employee counts and shift changes as follows:

- Buildings 5 & 6 = 2 largest shifts (20 + 10) = 30 production workers / 1.5 = 20 spaces
- Building 5 = 2,500 SF office / 375 = 7 spaces (common use areas not included)

Proposed required parking = 27 spaces

Total existing and proposed required parking = 291 spaces

Total parking provided = 334 spaces (includes motorcycle parking)

Additionally, a total of 10 existing and proposed accessible parking spaces (8 HC, 2 Van Accessible), 13 existing and proposed motorcycle/scooter, and 20 existing and proposed bicycle parking spaces will be available and located on the facility.

Landscaping -

The perimeter of the site will be landscaped consistent with the surrounding context and per the standard requirements of the City of Mesa. The landscape components are integral to the design of the site and buildings and are meant to enhance the surrounding context. The proposed landscaping palette will consist of an array of drought tolerant and indigenous plants that will respond to the materials, textures and colors used in the surrounding area.

Utilities -

The onsite water, fire water, and sewer services and other utilities will be supplied via existing on-site services. Project designers will work with City of Mesa staff to meet any on-site looping requirements. Interestingly, and with exception of electricity from SRP, the proposed project will require very little, if any, in the way of public infrastructure upgrades.