Case No. 20PD004

Legal Description:

Lot 5 and 6 of Marlin Industrial Park, located in Section 20, T1N, R8E, BHM, Rapid City, Pennington County, South Dakota
Community Planning & Development Services
300 Sixth Street
Rapid City, SD 57701

RE: Final Planned Development/Major Amendment Checklist – Quality Brands Distribution Warehouse Addition, Rapid City, South Dakota

Dear Review Engineer:

Please find all the attached application materials and supporting documentation required to satisfy the City of Rapid City’s requirements for an Final Planned Development/ Major Amendment for the proposed building addition located on Lots 5-6 of Section 20, in Marlin Industrial Park located within the City limits of Rapid City, South Dakota.

Included with this submittal are:
1. Application & fee
2. Site Plans
3. Conceptual Building Elevations
4. Building Floor Plan

Project Background:
GPSD, Inc. is expanding the Quality Brands Distribution Warehouse located off of Marlin Drive. The proposed Quality Brands Distribution Warehouse addition be will 60’ x 207.5’.

Building Use and Zoning:
The proposed addition will be used as a warehouse.

The property is zoned Heavy Industrial District.

Parking Requirements:
See attached site layout. The parking calculations were based upon the 2011 plan development agreement. According to the original agreement, 3.66 parking spots were required per 1000 SF of office space and 0.5 parking spots were required per 1000 SF of warehouse space. The addition to the warehouse would increase the number of standard parking spaces by 8. We are providing a total of 78 parking spaces, including 5 ADA accessible spaces.

Landscaping:
See attached landscaping plan. The landscape calculations were based upon the 2011 plan development agreement. The original submittal required 397,669 landscape points. This submittal requires 385,148 landscape points. With the removal of approximately 13,840 SY of grassed area, an additional 1,319 points are required. Three medium sized trees have been added for a total of 385,329 landscape points. See attached calculations in Appendix A.

Sanitary Sewer, Water, and Storm Water:
The proposed addition will be used as a warehouse so there is no need for water or sanitary sewer. The northwest corner of the lot is located in the flood plan, but no work will be conducted in the flood plan.

There is currently a storm water system in place on the property that feeds into a storm water treatment pond located at the northwest corner of the property. With the building addition the storm water treatment pond was analyzed to verify the capacity. The rational and modified rational methods were used for all project runoff calculations for 2-year, 10-year and 100 – year frequency storm events as specified in the Rapid City Drainage Criteria Manual and IDCIM.
The runoff coefficients were calculated based on the area of runoff for lawn, roof, sidewalk and paved street for the two separate sub-basins, the East sub-basin located on the east side of the building and the West sub-basin located on the west side of the building. Runoff coefficients were calculated based on the area of runoff for undeveloped conditions for the existing sub-basin. Runoff coefficients for West sub-basin are estimated to be 0.520, 0.603 and 0.678 and were utilized for the 2-year, 10-year and 100-year events. Runoff coefficients for East sub-basin are estimated to be 0.323, 0.404 and 0.530 and were utilized for the 2-year, 10-year and 100-year events, respectively. Runoff coefficients for the existing sub-basin are estimated to be 0.050, 0.055 and 0.300 and were utilized for the 2-year, 10-year and 100-year events, respectively. The time of concentration used for both the East sub-basin and West sub-basins was 8 minutes. The time of concentration used for the existing sub-basin was 14 minutes. The total amount of runoff for both basins combined in the 100-year event is 37.2 cfs.

The modified rational method was used to analyze the 2-year, 10-year and 100-year storm events. The required storage volume for a 2-year storm event is 0.081 ac-ft., for a 10-year storm event is 0.142 ac-ft. and for a 100-year storm event is 0.113 ac-ft. The elevation at the top of the berm for the current storm water detention pond is 3232 ft. The storage at 1 ft. of freeboard is 0.60 ac-ft at an elevation of 3232 ft. The current site storm water detention pond has adequate capacity to handle the additional storm water runoff from the site.

**Building Height:**
The proposed building can be no more than four stories and no taller than 45’ as measured according to Rapid City Code. The approximate height from the finish floor to the building height is approximately 31’6". Current zoning allows for a maximum height of 45’ or 4 stories. See attached architectural plans for elevation views.

**Lot Coverage:**
The size of the lot is 10.43 acres +/- or 454,331 SF +/- . The footprint of the proposed warehouse addition is 12,450 SF. The total building including the addition is 70,482 SF which equates to a lot coverage of approximately 16%. Rapid City zoning code allows for maximum lot coverage of 80%.

**Lighting:**
No additional lighting is being proposed at this time.

**Signage:**
No additional signage is being proposed at this time.

Thank you for your assistance in this matter. Please do not hesitate to call if you have any questions.

Sincerely,
KTM Design Solutions, Inc.
(605) 791-5866

Michael Towey

Enclosures
SOUTH ELEVATION

EAST ELEVATION

WEST ELEVATION