

Date: June 10, 2015  
To: Edgerton Planning Commission  
From: Kenneth Cook, AICP, CFM, Community Development Director  
Re: Consideration of Waivers for Paving Material

7-C

**BACKGROUND INFORMATION**

On May 12, 2015 the Planning Commission considered amendments to a previously approved Final Plat and Final Site Plan for the subject property. Following this meeting, the applicant submitted updated drawings to deal with a number of items that were discussed in the staff report. The applicant also made a number of requests for consideration at the June 9, 2015 Planning Commission meeting for an Alternative Landscape Plan, for waivers/revisions for fencing, building materials and paving materials and also for an extension of time for making the necessary improvements. The Planning Commission approved the applicant's requests with the exception of the paving materials and requested that staff provide additional information, including a recommendation from the City Engineer, in regards to the request. A memo from the engineer has been attached.

**History of Paving for Container Storage & Maintenance Facilities**

Amendments were originally proposed to the Unified Development Code (UDC) in 2012. These amendments included the addition of specific standards for Cargo Container Storage Facilities and Cargo Container Repair and Maintenance Facilities as part of the Conditional Use process. Prior to these changes the UDC did allow these types of facilities as Conditional Use, but had no specific standards or conditions that must be complied with as part of an operation or development. Staff understands that the regulations which were originally brought before the Planning Commission (April 10, 2015) proposed to allow the type surfaces to include concrete, asphalt, chip seal or milled asphalt surfaces. This matched the standards which had recently been adopted for Johnson County. The Planning Commission recommended approval of the standards as proposed similar to Johnson County.

This recommendation was presented to the City Council on April 26, 2012. During this meeting, the City Council decided to return the request to the Planning Commission for additional consideration of the Minimum Lot Size and Paving requirements. These items were then considered again by the Planning Commission at their May 8, 2015 meeting and the Planning Commission, following discussion, voted to recommend approval of the original UDC amendments. Staff has included pictures of existing cargo container storage facilities located near the Argentine Intermodal in Kansas City, KS, that were presented as part of the presentation.

The proposed amendments to the UDC were brought back before the City Council at the May 24, 2012 meeting. After significant discussion and comment from cargo container storage operators, City Council approved the amendments to the UDC; however, City Council purposefully removed chip and seal and asphalt millings as approved surfaces.

**Existing Developments**

The issue of how this requirement has currently been enforced on other developments was also discussed at the June 9, 2015 meeting. All applications that have currently come before the Planning Commission for the development of Cargo Container Storage Facilities and Cargo Container Repair and Maintenance Facilities (also including warehouse and other industrial

development) have adhered to the requirement that all paving must be asphalt or concrete. Currently, JB Hunt has developed their entire site in compliance with this standard. While, Nickell Intermodal has only received approval to develop the first phase of their development, they have also complied with this standard. TSL, while currently under construction and with an allowance for temporary use of the site without the required paving, has specified that they intend to pave their property with concrete. While there has been some discussion that the operation on the current request is a different type of operation than these other facilities, the UDC currently considers all of these operations as the same type of use and therefore must adhere to the same standards.

**Recommendation**

Upon reviewing the information and recommendation that has been prepared by the City Engineer, together with a review of the history of the standard requiring the use of concrete or asphalt for the paving of all driveways, parking, loading and storage areas, and Ordinance 967 approving the Conditional Use, staff recommends that the request be denied and that the applicant be required to comply with the standard for all paving be asphalt or concrete.



## **Memo**

To: Kenny Cook  
From: David Hamby, P.E., CFM, City Engineer  
Dan Harden, P.E.  
Date: July 7, 2015

Re: Arrowhead Intermodal Services, LLC July 1, 2015 proposal

The City has been asked to favorably consider the placement of asphalt millings in lieu of asphalt or concrete surfacing on the CY Arrowhead property in the community. To begin this discussion an explanation of these materials and installation is in order.

Recycled Asphalt Pavement (RAP) is asphalt pavement material that had been placed in service as a pavement and was later milled off. The resulting particles vary in size from dust particles to chunks the size of your fist and larger. There is some residual asphalt oil content remaining in the material.

RAP is not a homogenous and predictable material. The gradation and residual asphalt percentage vary substantially from batch to batch and from location to location within the same batch.

RAP is usually truck dumped and placed with construction equipment capable of spreading the material. Spreading the material segregates the material as the larger pieces move to the end of the blade used for placement.

Our experience is the American Association of State Highway and Transportation Officials (AASHTO) pavement structural number for RAP is about 0.15 to 0.20 per inch of layer thickness. Hot mix asphalt (HMA) pavement is a combination of approximately 95% crushed limestone and sand bound together by asphalt cement. Asphalt cement is heated then mixed with the crushed limestone and sand at a hot mix plant. The resulting mixture is a homogenous and predictable material. The resulting HMA is trucked to the paving site. The trucks dump the HMA into hoppers located at the front of paving machines. The asphalt is placed without segregation, and then compacted using a vibratory roller driven over the asphalt.

AASHTO assigns a structural number for HMA of 0.44 per inch. This means an inch of HMA has over twice the strength of an inch of RAP. With a proper foundation and good drainage a HMA pavement is permanent pavement construction.

RAP has a tendency to form extreme washboards in the traveled way and lose fine aggregate on the surface. Fog seals can abate this phenomenon for about a week or two. Single or double bituminous surface treatments can slow down the rate of washboarding but do not eliminate washboarding. RAP is not considered to be permanent pavement surface.

Based on our past 40 years of experience with the placement, use and maintenance of RAP surfaces, a review of the Arrowhead letter of July 1, 2015 and a site visit to observe an example installation we are recommending denial of the use of asphalt millings as an equivalent substitute for the use of HMA or Portland cement concrete.

## Article 7 – Conditional Uses – Specific District Requirements for Industrial Districts

### D. Districts B-P, L-P, I-G, and I-H.

1. All uses in the I (Industrial) Zoning Districts listed as conditional must submit a site plan for review and approval with special emphasis given to:
  - a) Parking, circulation, and loading.
  - b) Screening of outdoor materials.
  - c) Conditions listed in 7.1(C) above. (Ord. 845; 2008)
2. All uses in the L-P (Logistics Park) Zoning District listed as Conditional Uses must submit a site plan for review subject to the following requirements:
  - a) Cargo Container Storage Facilities and Cargo Repair and Maintenance Facilities: All cargo container storage and cargo container repair and maintenance facilities (collectively referred to as “facilities”) shall be subject to the following performance provisions:
    1. Access: No cargo containers or semi-trailers (either on or off a chassis), or a chassis, may be stored in a manner that impedes access to public rights-of-way, public utility or drainage easements, structures, and buildings.
    2. Exterior Lighting: Facilities shall provide lighting on-site, including at all vehicular entrances and exits. A lighting plan shall be submitted and approved.
    3. Minimum Lot Size: Facilities shall have a minimum lot size of twenty (20) acres.
    4. Noise: Noise from businesses and facilities shall not exceed 60 dB(A) in any adjacent residential district or 70 dB(A) in any adjacent commercial or industrial district or property.
    5. Paving: All interior driveways, parking, loading, and storage areas shall be paved and dust-free. For purposes of this stipulation:
      - i. Paving shall mean concrete or asphalt: and
      - ii. Dust-free shall mean that all interior driveways and storage area surfaces shall be kept free of dust, dirt or other materials to prevent the migration of dust off-site.
    6. Parking: Facilities shall comply with the Article 5.2 L-P District Off Street Parking and Loading regulations. No portion of any required off-street parking or loading/unloading areas shall be used for the storage of cargo containers, semi-trailers (either on or off a chassis), chassis or similar storage devices.
    7. Cargo Container Stacking: Cargo containers shall not be stacked more than five (5) in number.
    8. Chassis Stacking/Racking: Empty chassis may be stored on end (racking), or may be stacked. When stacked, chassis shall not be more than five (5) in number.
    9. Screening and Landscaping: Screening may be required on the perimeter of the property. Screening shall be a combination of fencing and landscaping or berming and landscaping. Screening shall comply with requirements Article 5.2 L-P District Landscape Standards.
    10. Setbacks and Separation Distance: All buildings, structures, parking and other uses on the property, shall be subject to the setback requirements in Article 5.2 L-P District Setback, Yard, Area Regulations, except, however, the parking or storage of cargo containers or semi-trailers (either on or off a chassis), and chassis (racked or stacked) shall be subject to the following setback standards that may vary depending upon the difference scenarios set forth below:
      - i. When abutting (touching), or across the street from non-residentially zoned property, such parking or storage shall be setback from any exterior property line of the subject property a distance equal to the height of the cargo container or semi-trailer (either on or off a chassis), and chassis (racked and stacked);

- ii. When abutting (touching) public right-of-way, such parking or storage shall be setback from any exterior property line of the subject property a distance equal to the height of the cargo containers or semi-trailers (either on or off a chassis), and chassis (racked or stacked);
  - iii. When abutting (touching), or across the street from, residentially zoned property, such parking and storage shall be setback a minimum of 250 feet from the nearest property line of the residentially zoned property;
  - iv. When abutting (trouching), or across the street from, a habitable dwelling, such parking and storage shall be setback a minimum of 300 feet from the nearest dwelling; and
  - v. For purposes of Stipulations 3 and 4 above, measurements shall be made between the nearest property line of the residentially zoned property or the nearest edge of a dwelling, and the nearest cargo container, semi-trailer (either on or off a chassis), or chassis.
11. Signage: Business signs shall be allowed according to Article 5.2 L-P District Signage regulations. No signage, other than shipping company identification logos and placards, shall be allowed on any cargo container, semi-trailer or chassis.
12. Site Plan: A site plan shall be submitted with the application. The site plan shall be prepared in accordance with the requirements of Article 9 (B) (3) of these regulations.
13. Other Rules and Regulations. All facilities shall abide by any and all governmental rules, regulations, codes and specifications now in effect or hereafter adopted that would be applicable to this permit or the use of the property by the applicant/landowner.
14. Deviations: In the event that an applicant desires to deviate from the above performance standards and provisions for certain Conditional Uses, the applicant shall submit written information to the Governing Body indicating the circumstances which are believed to necessitate the need for a deviation(s), and the applicant shall provide a list of alternative materials, designs or methods that are equivalent to the performance standards and provisions for the L-P Zoning District, Section 5.4, Sections G through Q in the regulations. The application may only be approved if findings are made by the Governing Body that 1) due to the circumstances of the application, it would be unnecessary to impose the standards(s) and equivalent alternatives should be allowed, b) that the spirit and intent of the regulations are being met, c) that granting the deviation shall not adversely affect adjacent or nearby property, and d) the application shall otherwise comply with all building code(w) and safety requirements. (Ord. 915, 2012)



























