

4/28/2015



ND Public Service Commission
Testing & Safety Division
600 East Boulevard Avenue
Bismarck, ND 58505

Request for Variance Permit:

CHS, Inc. d.b.a. CHS – Lake Region Grain (CHS) is requesting a variance permit for the installation of one new truck scale that will be located at the following site:

CHS – Lake Region Grain
301 1st Avenue
Lakota, ND 58344

The scale is manufactured by Rice Lake Weighing Systems (RLWS) out of Rice Lake, WI. The scale being installed is above ground RLWS SURVIVOR® OTR Model EZ11711-ST-100-OTR truck scale with guide rails. The deck size is 117' x 11' constructed of 5/16 top plate steel. The concentrated load capacity (CLC) is 100,000lbs. All trucks weighed on the scale will fall within their CLC and not pose a safety hazard.

CHS is requesting a variance permit to allow the foundation of one scale to be a floating slab design, instead of piers below frost. The reason CHS is requesting a floating slab variance is because we feel it is a more stable foundation design, especially in a high water table situation. Also, a floating slab foundation is less likely to interfere with any underground obstructions (ie.: power lines, gas lines, or fiber optic cables). The CHS floating slab design specs exceed the manufacturer's minimum requirements for slab on grade design. (Please see foundation PDF reference-only drawing.) The floating slab foundation shall have the following specifications:

- The foundation will be a minimum 12" thick concrete floating slab with the minimum soil bearing of 1500 pounds per square foot. A copy of the soil test report for this site is attached.
- Installation will incorporate a minimum 24" base of uniform, compacted, permeable aggregate. A monolithic concrete foundation slab will be poured on top of the base aggregate and used to support the scale weighing elements.
- The top surface of the concrete foundation slab will be installed above surrounding grade level to allow water to flow away from the foundation and away from the aggregate base that supports the foundation.
- The concrete foundation slab will include the following: Two mats of rebar are required at load bearing sections. Rebar in the top face perpendicular to traffic shall be at least #5 at 4" on center (O.C.), with 5'-0", #4 bars in the direction of traffic at 12" O.C. Rebar in the bottom face and in the direction of traffic shall be spaced at 6" O.C. beneath the cells within the development length, and spaced at 12" O.C. across the mid-span of the slab. Between load bearing sections, a single mat of #4 rebar at 12" O.C. shall be incorporated in both directions.
- Scale will have a minimum of 12 inches clearance, between "I" beam and the slab.
- The end piers of the foundation will have end walls to prevent fill material from interfering with the scale operations.

1 **WM-15-427** Filed: 5/6/2015 Pages: 3
Request for variance permit (floating slab)

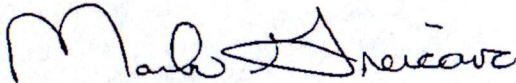
CHS, Inc.

Mark Greicar, General Manager

- Installation will include 39' concrete approaches on each end of the scale. The approaches will be in a straight line away from the scale, the same width as the scale. Past the 12' flat approach required by the state, an additional 27' sloped approaches the same width as the flat approaches will be added. The slope of these approaches shall not exceed 1/3" per foot. The sloped approaches shall have thickened footing on the sides down to the surrounding road elevation.
- The scale will eventually be enclosed in a building once the project progresses further.

Please let me know if you have any questions regarding this request, or if you require any further information. Thank you in advance for your consideration.

Respectfully,

A handwritten signature in black ink, appearing to read "Mark Greicar". The signature is stylized with a large initial "M" and a long, sweeping underline.

Mark Greicar
General Manager
CHS – Lake Region Grain
PO Box 339
301 1st Avenue
Lakota, ND 58344
mark.greicar@chsinc.com
(701) 247-2917

Bauske, Shelly A.

From: Tiffany Jacobs <tiffany@northwestscale.com>
Sent: Wednesday, May 06, 2015 4:45 PM
To: Fahn, Patrick J.; Bauske, Shelly A.
Cc: mark.greicar@chsinc.com; 'Jim Jacobs'; michael.heinen@chsinc.com
Subject: CHS Lake Region Grain - Lakota ND Request for Floating Slab Variance
Attachments: CHS, Inc. Lakota - ND Request for Variance.pdf; RLWS Drawing # 165838 CHS - Lakota (Floating Slab Inbound Scale).pdf; Lakota Truck Scales Soils Report.pdf; CHS Dry Fertilizer Building.Field Density Testing.2015-03-30.Rpt.0127.pdf

Importance: High

Pat & Shelly,

Please review the attached Request for Variance for the floating slab scale foundation that is being installed at the CHS Lakota location, along with supporting documents. (It will be similar to the floating slab foundations completed at the CHS Langdon & Calvin locations.) Please let myself or Jim know if you need any further information.

Thank you,
Tiffany Jacobs

Northwest Scale, Inc.
2210 Main Avenue East, Suite 2A
West Fargo, ND 58078
Phone: (701) 298-9527
Fax: (701) 356-9520
www.northwestscale.com

This e-mail is intended only for the person or entity to which it is addressed and may contain information that is privileged, confidential or otherwise protected from disclosure. Dissemination, distribution or copying of this e-mail or the information herein by anyone other than the intended recipient, or an employee or agent responsible for delivering the message to the intended recipient is prohibited. If you have received this e-mail in error, please immediately notify us by responding to this e-mail and delete it from your records.