

## CITY OF RAPID CITY

## **Engineering Division**

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December 16, 2004

Mr. Jerry Olson J&D Precast, Inc. P.O. Box 1097 Rapid City, SD 57709

RE: "Or Equal" Request by J&D Precast

Dear Mr. Olson:

The purpose of this letter is for the City of Rapid City Public Works Department (City) to comment on your request to obtain an "or equal" classification for sewer manholes. We have received and reviewed a letter dated August 27, 2004 from you asking for the "or equal" classification. We also received and reviewed poured primary invert details which were attached with the letter. At this time it is the recommendation of the City of Rapid City Public Works Department to decline your request for the "or equal" classification. We have listed the reasons for this recommendation below.

- The City of Rapid City Standard Specifications for Public Works 2004
  (Specifications) states in Section 9.2 "The manholes shall be manufactured at a
  precast facility that is certified by the American Concrete Pipe Association and is
  approved for supplying products to the South Dakota Department of
  Transportation." Documentation is needed from J&D Precast showing adherence
  to these specifications.
- Section 9.2 of the Specifications states that "O-ring gasketed joints between manhole sections shall be o-ring gasketed joints conforming to the requirements of ASTM C443." Per inspection of the J&D Precast manholes by City Engineers it appears your o-ring gaskets meet these specifications, but documentation showing adherence to this specification is needed.
- Section 9.2 of the Specifications states that "Pipe connections to new manholes shall be constructed with a compression-type flexible connector cast into the manhole wall, as manufactured by A-Lok Products, Inc., or equal." Per inspection of the J&D Precast manholes by City Engineers it appears your compression-type flexible connectors meet these specifications, but documentation showing adherence to this specification is needed.
- The poured primary invert details sent with the letter show sweep radiuses which do not meet the requirements set forth in the Standard Manhole Detail with Monolithic Base (Detail 9-1). This detail states that "A minimum radius of 2.5 times the inside diameter of the branch main is required for all sweeps." J&D Precast



would be permitted to demonstrate that they can construct hand formed inverts that will meet this requirement. Other precast facilities have demonstrated that quality hand formed inverts can be achieved in the controlled environment of the precast facility.

In general, documentation needs to be submitted by J&D Precast to demonstrate adherence to the City's Specifications before we can approve and recommend the status of your product as an "or equal". A letter stating that you meet the specifications for manholes should be provided. For any items that do not meet our specifications please provide documentation supporting your rationalization for not needing to adhere to the City's specifications.

We are copying the Mayor, Design Appeals Review Board (DARB), and City Council this letter as we understand you would like the DARB Board to consider the "or equal" status. We will place on the next Public Works Committee Agenda an item requesting the City Council ask DARB to review your request for "or equal" status.

Please contact me with any questions at 394-4154.

Sincerely,

City of Rapid City

Stacey Titus, P.E. Project Manager

Cc: Mayor Shaw, DARB, City Council, Ted Vore