



**Ferber
Engineering
Company, Inc.**

- Civil Engineering
- Water Resources
- Transportation
- Land Surveying

January 12, 2010

RECEIVED

JAN 12 2010

**Rapid City Growth
Management Department**

Ms. Patsy Horton
Rapid City Growth Management
300 6th Street
Rapid City, SD 57701

**RE: South Dakota Game, Fish and Parks – Outdoor Campus West – OSE# G2105—27X
Growth Management 09SR117 – SDCL 11-6-19 Review to Extend Public Utilities on
Public Property and Construction of Street within Public Right-of-Way**

Dear Patsy:

Please find attached the following requested items for the above-mentioned project. The attached items include:

- 4 – 24"x36" Plan Sheets of Sheet C2.04 (water and sewer) showing Dean Lane modifications.
- 4 – 24"x36" Plan Sheets of Sheet C2.05 (plan and profile) for the requested modifications of Dean Lane.
- 4 – 24"x36" Plan Sheets of Sheet C2.06 (sections) for the requested modifications of Dean Lane.
- 4 – 24"x36" Plan Sheets of C2.07 for the requested extension of 12-inch water main in the Knutson Lane right-of-way. This is a new sheet.
- 11"x17" plan sheets for those listed above have also been included.

In addition to the submitted information, we request the following exceptions to be considered with this project:

- 1) **Street Width** – the SDGFP requests an exception to the design criteria to allow a 22-foot wide pavement width for Dean Lane.
 - a. The lane width provided in the plans accommodates the anticipated vehicle styles, which include recreational vehicles, school buses, pickup/boat trailers and fire department vehicles.
 - b. The street width provided in the plans allows all grading to take place within the existing right-of-way. The grading includes an open channel which allows street flows collected on Sturgis Road to pass efficiently and non-erosively through the right-of-way to its current outfall location. The open channel allows some level of low flow stormwater infiltration as well as stormwater quality treatment once vegetation is established.

- c. At Sturgis Road, a three-lane intersection is provided to allow one lane into Dean Lane from Sturgis Road, one left turn onto north bound Sturgis Road and one right turn onto south bound Sturgis Road.
- 2) **Street Centerline** – the SDGFP requests an exception to the design criteria to allow an offset street centerline for Dean Lane.
 - a. The center of the proposed three-lane intersection of Dean Lane at Sturgis Road is offset from the center of the right-of-way by 9.4 feet (see previously submitted information). The offset is required to allow for the grading associated with the right-turn lane onto Sturgis Road within the 60-foot right-of-way.
 - b. The South Dakota Department of Transportation has accepted this alignment. The alignment is offset approximately 29 feet from the centerline of an equipment approach on the east side of Sturgis Road.
 - c. The offset centerline allows for road grading and open channel grading west of the beginning of the right-turn lane taper.
- 3) **Turn-Around/Cul-De-Sac** – the SDGFP requests an exception to the design criteria to allow a public accessible turn-around on State property in lieu of a turn-around in the Dean Lane public right-of-way.
 - a. The revised plans provide for a public access easement on State property to accommodate the public turn-around.
 - b. The proposed turn-around area utilizes a circular “bulb” of pavement that combines four traffic aisles and the access to Dean Lane. This arrangement reduces overall impervious area, which in turn reduces stormwater runoff and accommodates the requirements of a turn-around.
 - c. A Public Access Easement is being filed for the turn-around in conjunction with this submittal.
- 4) **Approach Width** – the SDGFP requests an exception to the design criteria to allow an approach width onto Dean Lane of 36 feet.
 - a. The proposed pavement width at the north Dean Lane right-of-way line is 36 feet, but narrows to 28 feet within 10 feet of the property line.
 - b. The additional width comes from the curb radius required to accommodate the turning radius of a fire department pumper truck to access the turn-around discussed above. Additionally, the radius also helps with school bus, recreational vehicle and pickup/trailer turning movements entering the site.
- 5) **Sidewalk** – the SDGFP requests an exception to the design criteria to allow sidewalk on only one side of Dean Lane.
 - a. Sidewalk is being provided along the north side of Dean Lane within a pedestrian access easement.
 - b. Sidewalk along the south side of Dean Lane would serve no purpose because Dean Lane is a dead-end street (see 09VR009 – Dean Lane Right-of-Way Vacation Request).
 - c. The north side sidewalk will provide pedestrian access to both adjacent properties.
- 6) **Construction of City Water and Sanitary Sewer with public right-of-way** – the SDGFP requests an exception to the design criteria to allow no construction of either public sanitary sewer or water mains within the Dean Lane right-of-way.
 - a. Public water and sanitary sewer facilities are being extended through the site from N. 40th Street on the south side of the SDGFP property to Knutson Lane on the

Ms. Patsy Horton
January 12, 2010
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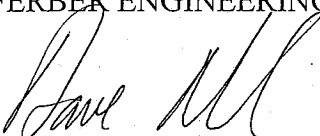
north. Additionally, the proposed water main will be looped to the existing Sturgis Road 8-inch water main.

- b. The existing commercial development to the south side of Dean Lane has sanitary sewer and water service from the existing utilities in Sturgis Road.

We appreciate your attention to this matter. If you have any questions or comments, please call.

Once approved, the enclosed plan sheets will be forwarded to the contractor for incorporation into the work.

Sincerely,
FERBER ENGINEERING COMPANY, INC.



Dave Muck, PE/LS
Project Manager

Enclosures: as noted

Cc: Mr. Steve Ellingson, SDGFP, w/o attachments
Mr. Donovan Broberg, ARC International, w/o attachments



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MEMORANDUM

RECEIVED

JAN 13 2010

**Rapid City Growth
Management Department**

TO: Ms. Patsy Horton

FROM: Dave Muck, PE/LS *DM*

DATE: January 12, 2010

RE: **SDGFP – Outdoor Campus West OSE# G2105—27X
Preliminary Oversize Reimbursement Request for 12-inch Knutson Lane Water
Main Connection**

As requested by the City of Rapid City, the SDGFP will construct the 12-inch water main connection from Sturgis Road to the new 8-inch water main extension through the site along the existing Knutson Lane right-of-way. In doing so, the SDGFP requests that the oversize cost difference between the base diameter of 8-inch water main and the constructed diameter of 12-inch water main be reimbursed by the City of Rapid City.

We have attached two preliminary estimates of both 8-inch and 12-inch water main along the alignment provided on Sheet C2.07 submitted for the SDCL 11-6-19 Review (09SR117). The estimates are for materials only and were derived from bid prices supplied by the materials supplier for the project for 8-inch water main and appurtenances. At our request, the supplier furnished 12-inch water main and appurtenance prices.

The fitting prices include the fitting, MegaLug restraints and gaskets. Likewise, the valve prices include the valve, valve box, valve box adapter, MegaLug restraints and gaskets. We have also included the costs for both 20-inch and 24-inch steel casing.

The preliminary cost of materials for constructing an 8-inch water main along Knutson Lane is approximately \$7,254.90. The preliminary materials cost for a 12-inch water main in the same location is \$13,881.35. This results in a reimburseable materials cost of \$6,626.45.

In the near future we will have the contractor provide us with detailed cost estimates for each, which may include increased labor rates associated with the larger diameter pipe. When we have that information in hand, we will make an official oversize reimbursement request.

If you have any questions or comments, please call.



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December 11, 2009

RECEIVED

DEC 11 2009

Ms. Vicki Fisher
RC Growth Management Department
300 6th Street
Rapid City, SD 57701

Rapid City Growth
Management Department

**RE: South Dakota Game, Fish and Parks – Outdoor Campus West – OSE# 2105—27X
SDCL 11-6-19 UTILITIES ONLY**

The SDGFP Outdoor Campus will serve as the new Region 1 Office as well as an Education Center. The facilities that will be constructed include a main building that will include the Regional Office (north end), the Education Center (south end) and an Interpretive Area that will connect both ends of the building.

One of the primary functions of the Region office portion of the facilities is wildlife management, which includes law enforcement. The other is outdoor education. The anticipated activities associated with new Regional office do not differ from those currently performed at the West South Street facilities. The only difference in overall use is the education program.

The main building entrance for visitors is via a pedestrian bridge across the existing pond from the Visitor's Parking area. The main access to the site will be via the existing Dean Lane right-of-way where a three-lane intersection at Sturgis Road will provide for smooth traffic flow. We have attached the SDDOT Approach permit signed by the City and forwarded to SDDOT. SDDOT has given verbal approval of the approach location.

It should be noted that the office/education center facilities will be LEED-certified Silver, as stipulated by state law.

Shop/Lab facilities will be constructed in the southeast corner of the property and will support the function of the SDGFP. The support facilities include a shop/laboratory and storage facilities for equipment, educational material and evidence.

The main building and support facilities will cover approximately six acres of the site. The remainder of the 33 acres +/- will be maintained in its existing natural state and/or restored to natural conditions. Within this open area, interpretive sites will be created to provide education to kids and adults alike. Fishing opportunities and other outdoor skills will be provided at various areas throughout the site.

The facilities that will be constructed will be a valuable addition to the City of Rapid City.

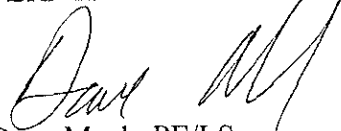
09SR117

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This submittal includes not only the SDCL 11-6-19 Review Application and materials for a Utilities Review only, but also a sanitary sewer easement vacation request and a right-of-way vacation request for a portion of Dean Lane. On December 23rd an additional submittal will be made that includes an 11-6-19 application for the site facilities (utilities excluded) and a right-of-way vacation for the northern most portion of N. 40th Street.

If you require additional information or if you have questions, please call.

Sincerely,
FERBER ENGINEERING COMPANY, INC.



Dave Muck, PE/LS
Project Engineer