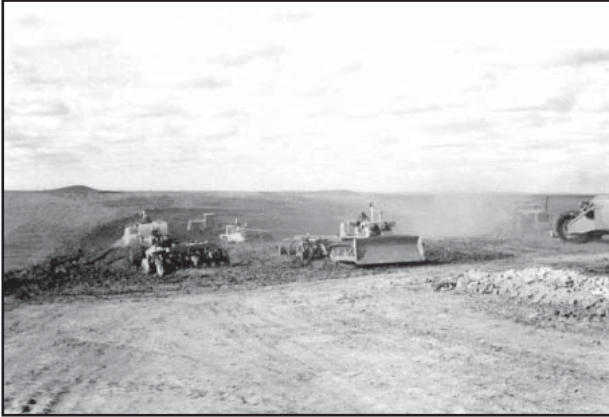


# 4 HIGHWAY LINES

FOR HIGHWAY DEPARTMENT PERSONNEL & SAFETY ORIENTED PEOPLE



Leveling Ground, Earth Moving Equipment, 84-088, 5277B



Earth Mover, Interstate Construction, 1960, 84-088, 5277B



Interstate Construction, making a path up hill, 84-088, 5277B



Earth Moving Equipment in 2011. Highway 65 construction project north of Isabel. The more things change, the more they stay the same.

*photos by Kristi Sandal, Nov. 2011*

## The Back Side of Mount Rushmore

by Dean VanDeWiele, Pierre area engineer

For most South Dakotans, 2011 will be remembered as the year of the flood, with devastation occurring in central and southeast South Dakota. I was new to the area Engineer position that February. I had no idea I was about to get into the ring with Mother Nature, who makes Mike Tyson look like an amateur. As stressful as the flood was, it actually took a side seat, and sometimes a back seat, to the numerous pipe failures and slides that were discovered that June.

That summer, the Pierre Area experienced 15 pipe failures, six landslides, and (for good measure) Mother Nature threw in an earthquake on Aug. 9 that measured 3.4 on the Richter Scale! Yes, it was beginning to feel like the end of days was near. I tried to give the job back to Jim Hyde. He smiled a stress free smile and at that moment I learned there was some information that should have been presented to me during the job interview!!

Some of the pipe failures were able to be fixed by maintenance crews. Others failures were much more catastrophic where entire inslopes disappeared. In one case on 1806 NW of Pierre, I got a call (Saturday night while flipping burgers) that a five-foot in diameter hole was on centerline, reaching a depth of approximately 20-feet (photo right).



Fortunately, a fisherman straddled the hole perfectly with his truck and boat trailer, causing no damage. The maintenance supervisor was called for guidance, it seemed the corrugated metal pipe (CMP) had failed (rusting out) and as turbulent water continued to flow in the clay orifice that remained, little bits of earth were “conveyed” out the outlet end for ...years? (Sadly, a similar situation a couple of weeks later resulted in fatalities on the Lower Brule Indian reservation).

So what the heck was happening? I was becoming a master that summer at the Chicken Little dance, but no matter how much I danced, the issues kept coming. So I took a massive chill pill and tried the “research and formulate a plan” approach (it worked better). The failures were predominantly CMPs, 16-gauge with a galvanized coating. Most were in areas where I

saw white deposits (alkalinity) in the ditch. Highways 14 west, 34, 1804 and 1806 were the major culprits, and all those routes were in or adjacent to river bluff country (are you starting to see the connection yet). 1804 and 1806 were Corp of Engineer and BIA routes and used to be gravel roads, some built just to access the Oahe dam. Most of these routes were graded in the ‘40s, ‘50s and ‘60s. Last, but not least, regrading projects, (where pipes historically get replaced,) were becoming a thing of the past.

I talked to everyone about possible fixes and the flavor of the month was pipe lining...literally placing a plastic pipe inside the failed host pipe - IF the host was still circular. I also discovered up and down the Missouri, and at other “hot spots” in the state, area offices were running into these same problems as well. While experimenting with a plastic lining north of Chamberlain, Tammy Williams (then in Mitchell), introduced me to Ross Eberle, a design engineer with True North Steel culvert manufacturing. Ross asked me some good and sometimes embarrassing questions;

Q: “What pipe do you use”? A: “That’s easy. RCP under the highway....Department policy since the beginning of time when Joe Feller was an EIT”.

Q: “OK, when you use CMP, what do you use?”  
A: “Easy. 16 Gauge galvanized CMP”.

Q: “Why”? (This is where intelligence faded)...A: “Because...this is how we do it?”

Q: “You ever “Aluminize”?” A: “Humma what?”

Elaboration: “Aluminize. It’s an alternate coating to galvanization that extends your pipe life 30% based on soil type, resistivity and ph”.

Q: “How ‘bout polymer coated?? You do know that will get you about the same life as a concrete pipe”. A: “Aaaah”.

Q: “Ever increase your wall thickness to increase life longevity”? A: “Aaaah”.

Elaboration: “Read this text book (yes he had it in the truck) on Corrugated Steel Pipe Design. Then call me and we’ll talk”. (Ever feel like you had to fake a bathroom run during the homily ‘cause you just needed a break??)

Reading the text I learned that if I knew the ph and

Continued on page 3

*Back Side: continued from page 2*

the resistivity of a soil, there were different coatings that should be used. Our 16-gauge galvanized standard, was not a good selection for all cases. In proper conditions, a galvanized pipe would get you 50 years....(Hmmm pipe installed in the '50s and '60s; Hyde takes a different job in 2010....Hey?!? Could he be that smart?) In a proper setting, an aluminized pipe will get you 75 years, and in hot soils, polymer coated will get you 75-100 years. Increase your wall thickness from 16 to 14-gauge, gain 30% more life. Some of these galvanized pipes had survived 50 years, and at no fault of anyone, they had simply tripped 200,000 miles on the ole' odometer. They were tired, they were spent and they simply had met or exceeded their intended design life.

But what if we utilize a pipe in an improper setting? In 1987, we put check dams on the north side of Highway 14 just west of the 1806 junction as you leave Ft. Pierre. In 2015, we constructed a \$2 million landslide/check dam replacement project (in which we used polymer coated 14-gauge pipe in the check dams). We had the soils tested. The chart in the book stated a 16-gauge galvanized pipe in those "hot" soils, should last about 30 years. 1987 + 30 year = 2017. And here we were scoping pipe failures at this location in 2012; A good(?) example of the wrong pipe type for the location.



In 2013 we were doing an encroachment survey on 1804 north of Pierre. We discovered a solid steel pipe with irrigation line running through it. With my new knowledge base of hot soils and steel pipe, I had some obvious concerns. We did not have a permit to occupy the right of way on file so I was able to get ahold of the farm superintendent who was around in 1979 when the steel encasement pipe was installed. He assured me he had a permit from Norm Konechne, the area engineer at that time. I shared my concerns about steel pipe and hot soils. He went on to state that he could show me the specs of the cathodic protection system\*\* they have installed with the encasement pipe and that the pipe looked almost like the day it was installed.(Excuse me?) He thanked me for calling, as it reminded him he needed to do his annual check on the cathodic protection system, and that they were

looking to install a new one, since everyone around here knows how nasty the soils are.....I thanked him, verified proper paper work was on file and allowed the encroachment. (This is where I make a sound that resembles a donkey).



Whenever practical, we are now lining repair practice using dual wall (air between the walls) and solid wall plastic pipe. We then place a concrete

collar on the ends between the new liner and host pipe and pump chemical grout (much like the expanding foam you get to seal voids and cracks around your house) into the void between the host pipe and liner pipe. (It may not be sexy, but does it really matter whether you hit a line drive or blooper over the infield? The end result is still first base.)

On 1806 northwest of the Oahe dam, we hired a contractor who drove one inch tubes into the grade and pumped it (and anticipated voids) full of this chemical grout to help minimize anticipated settlement. It bought us the two years needed before the ultimate pipe repair could be designed and constructed.

Region designers have also designed and let projects where we used "Oakum Rope" (like horse hair) dipped in a glue like substance to seal up concrete joints that have separated. The contractors then drill holes in the pipe's wall and pumped chemical grout into the voids behind the pipe. It can get spendy, but the traveling public does not experience any disruption and have no idea they are driving over workers making these repairs. The only negative is when you get smaller than a 30-inch diameter, proper ventilation, and finding that laborer with a 34-inch or smaller waist becomes the issue-- Proof that plenty of pizza buffets can ensure job security and career longevity.

Pipe failures in the Pierre area(region?) are pretty much an annual thing. Maintenance, area and region design staff alike are accustomed to jumping into action and doing emergency repairs, and/or preparing quick "fix it" plans for contractor repair. Sadly, the Chicken Little dance is getting a bit rusty, however, state highways continue to be safe and efficient, thanks to our staff continuing to address the back side of Mount Rushmore.

## GIS: Tips and Tricks

By Terry Erickson, GIS

Georeferencing an image into your ArcMap project is a relatively straight forward and easy process to complete. The main criteria is that your image (.jpg, .sid, .tif, etc.) has enough visible reference or control that can be associated with common points in the layer to which it is being referenced. Some common control points are section corners, state, county or township boundaries, city streets or any other feature that is visible on both the referenced image or layer file in ArcGIS.

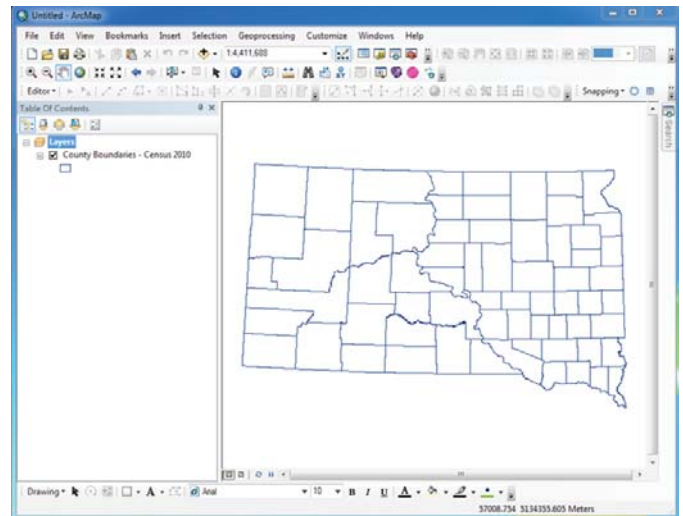
The more common points or control that you have to work with, the more accurate the results.

Note—if your source document is a paper map, a scan must be performed to save the document as an image file. After the scan has been completed:

**Step 1** - Open ArcMap (new or existing file)

**Step 2** - Add the layer to which the image will be referenced. In my example I will add the county boundary layer from the SD Datahound. (right)

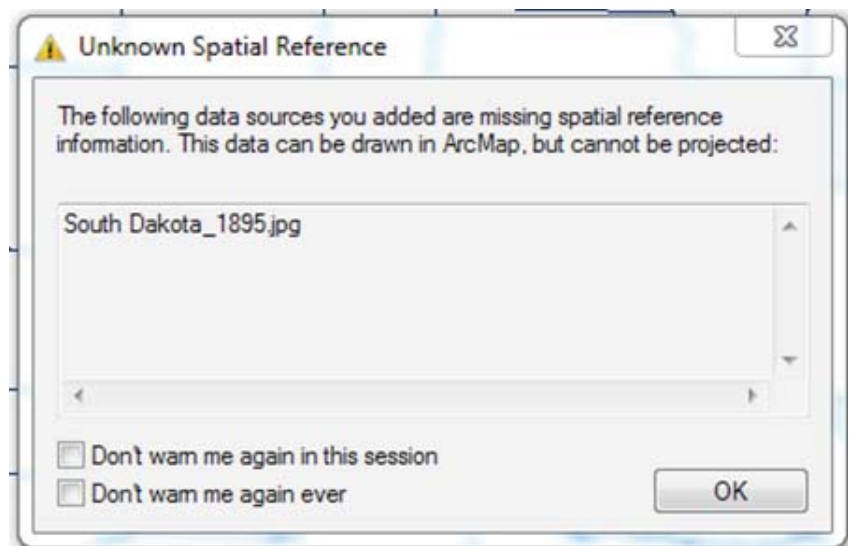
**Step 3** - Add the image using ArcCatalog to your Table of Contents (TOC) - in catalog, browse to the location of your stored image and drag and drop the image into your map window or TOC. (below)



Note—ArcCatalog can be accessed through the ArcGIS desktop.

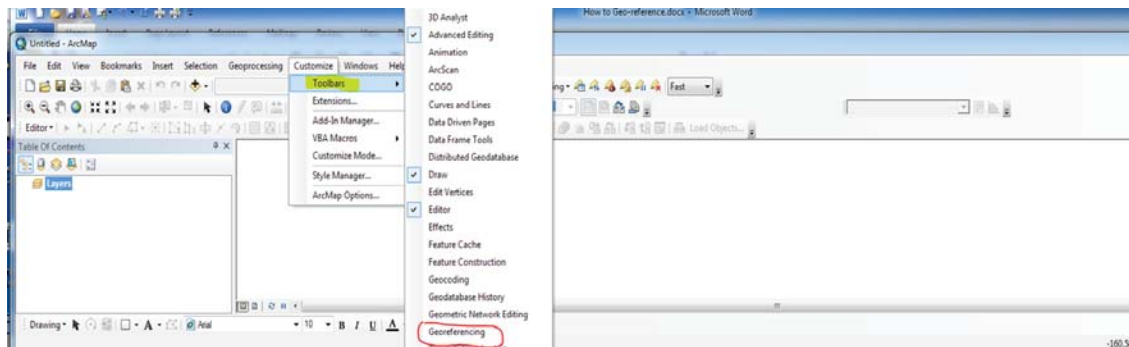


**Step 4**—After adding the layer, a Warning message box will appear that suggests that the image does not have a projection. It is just a warning - Click OK. (right)



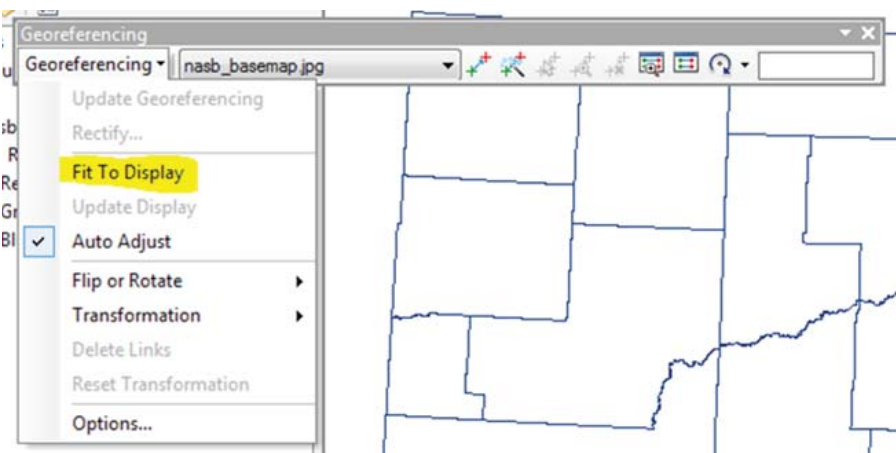
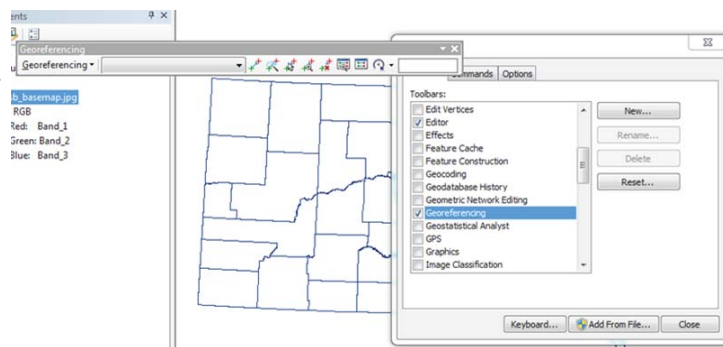
GIS: continued from page 4

**Step 5** - We must add a tool to our desktop called GeoReferencing. Remember there are multiple ways that a tool can be added. For this example we will use Customize (which can be found along the top of your Standard menu) - Toolbars - select the Georeferencing toolbar... (below)



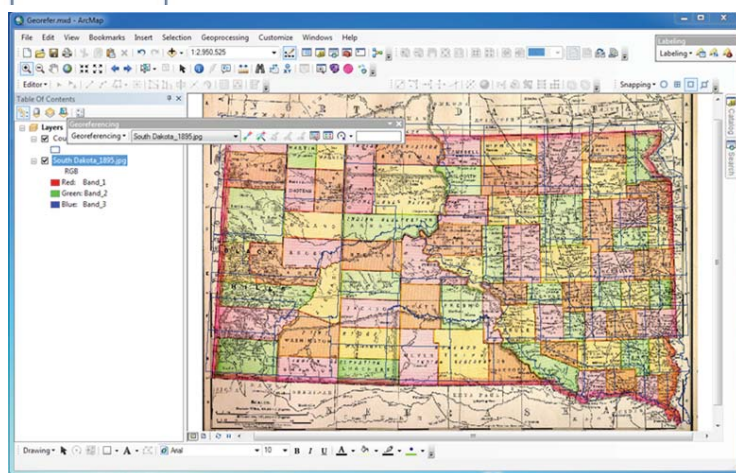
Or use Customize - Customize Mode - Toolbars tab - and check the Georeferencing checkbox. (right)

Notice how when the georeferencing tool palette is added the tools are immediately available.

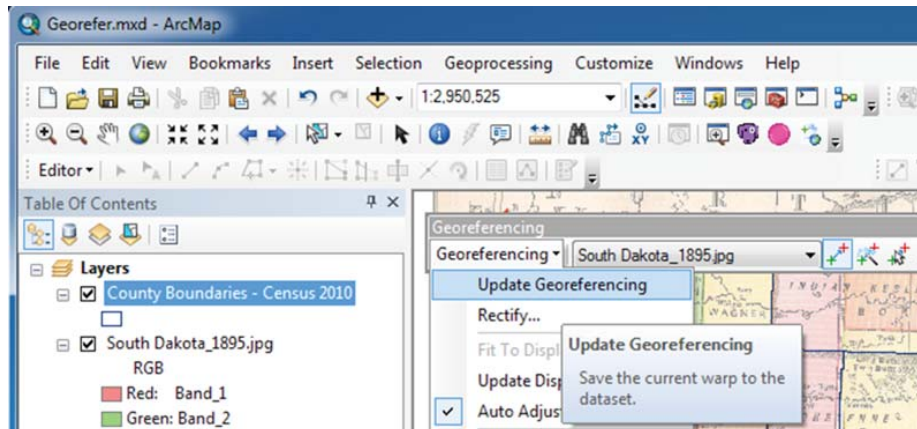


**Step 6** - In the Georeferencing toolbar select the dropdown next to the word georeferencing. Select "Fit to Display" (left)

Your image will then be rendered in your map display window - see example below. A scanned image will display exactly as it has been created. Due to the full color saturation of the image we will use our Transparency tool to display the image so the county boundary layer is visible through the image. Choose the transparency effect that works best for you. (right)

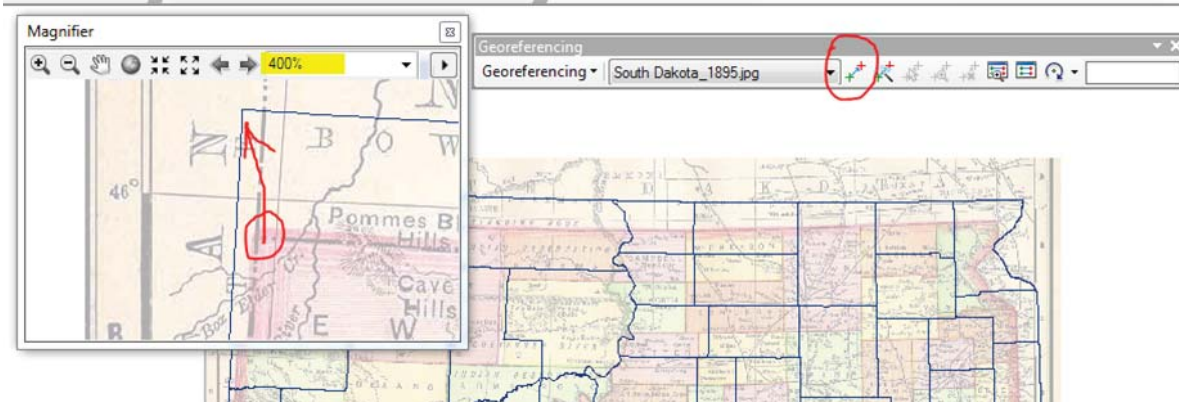


**Step 7** - Begin selecting your Control Points. ALWAYS begin by selecting the control or common point on the image first. I use the Magnifier (found in the Windows dropdown) to zoom into a location. Note the magnification value can be set to any value great or small. (below)



After selecting the control from the image move the cursor to the corresponding location on the layer (county boundaries) and continue this process (image to layer) moving in a counter or counter-clockwise motion until you have selected enough control that the image and layer look correct.

**Step 8** - when you are satisfied the image and layer look “close enough”, select the Georeferencing dropdown and click on “Update Georeferencing”. This saves the rectified image for use in your map project. If you have reason to believe that others may require this image, or if you intend to use the image in other projects, you must select the “Rectify” option from the dropdown. (below)



In conclusion, the georeferencing tool is a very useful option when you want to take old maps, plats, etc. and use them as reference or a starting point to recreate data in your ArcMap project. As with any new tool in your arsenal, it takes a little getting used to and practice.

If you have any questions, comments or concerns about everything the GIS tool can do, feel free to drop your friendly GIS staff a line.

Kim - Kimberly.Zerr@state.sd.us (605-773-3861)

Roger - Roger.Brees@state.sd.us (605-773-5444)

This will be my last “GIS Tips and Tricks” article as I will be moving into a new phase of life called retirement. It has been an awesome ride over the last 39 years, but it’s time for me to jump off this merry-go-round. I have complete faith that my predecessors will continue to provide quality service, customer satisfaction and useful trade tips in the future. I’ll leave you with this thought - *never make the same mistake twice, make it 5 or 6 times just to be sure!*

## ***Bring forth the Candidates!***

*By P & E Innovation Team*

Thank you to all that responded to the P & E Innovation Team survey. The number of responses was impressive and we appreciate the candor and details of these responses.

Now the fun begins. These ideas became candidate innovations that were reviewed and sorted by the Innovation Team to determine the following:

1. The program or programs, within the P & E Division, for these innovations.
2. Whether there is an innovation, similar to this candidate innovation, already in progress.
3. The Feasibility and/or Difficulty in implementing an innovation.

This information was sent to the program managers within the P & E Division for their consideration. Based on the criteria above, we gave the managers a preliminary ranking of the ideas within their Offices.

Bring forth the candidates! *(Insert brass fanfare here)*

The P & E Innovation Team met with the program managers on April 24 to discuss the goals of the Innovation team and provide instruction on how to complete a ranking of what they would consider priority innovations within their office.

We should all keep in mind that there is a wide range of candidate innovations within the ideas that you provided. Some of them might involve a quick change in policy or procedure to make them happen which usually take little time and/or cost and reap some measure of benefit. At the other end of the spectrum are innovations that involve one or more of the following:

1. Large investments of resources (monetary and human).
2. Reorganization of assets.
3. Analysis of and change in procedures.

For the larger innovations, a more complex investigation into the costs and benefits of the innovation will be necessary to further determine their feasibility.

The next step towards implementation of these innovations is establishing the priority of these innovations and determining how best to implement.

That will be our next installment...

*By Krystl Vermundson, Rapid City region secretary*

Rapid City Region staff gathered April 4, 2017, for their Annual Celebrate Safety Day. This year's event



included a few local speakers covering various safety topics, AGC Equipment simulators, and American Hall of Fame speaker Steve Gilliland. Random teams of employees competed in Truzzle, a team building exercise consisting of answering Trivia questions in order to get pieces to build their team's puzzle. In addition to Truzzle, teams had to get a blackout BINGO on "Mingle Bingo" by having fellow employees sign a square on their Mingle Bingo card if the question related to them. All in all it was a fun and informative day.

Winners of the Team Building events from left to right above.

Jim Dorfschmidt - Belle Fourche Area, Rick Walton – Belle Fourche Maintenance, Shayne Hagen – Oelrichs Maintenance, Scott Olson – Custer Area, Matt Rippentrop – Custer Area, Rik Bartels – Belle Fourche Maintenance



## How Do I Get To the Corn Palace??

By Steven Weisz, Mitchell area engineering supervisor



Those visiting Mitchell the next few years to admire the World's Only Corn Palace will need to navigate through orange cones and barricades once they depart I-90 at Exit 332 as Burr Street, from just south of Walmart to Havens Avenue, will be under construction for the next couple of years.

As a main arterial for the city of Mitchell, improvements to the dilapidated pavement will be appreciated by the 10,000+ travelers who navigate this route daily.

This route, originally constructed in 1968, was in need of numerous improvements that are included in the project goals of improving safety, drainage, pedestrian mobility and pavement condition. In addition, clearance below the I-90 structures will be increased.

Expansion of retail businesses and lodging south of I-90 in the last 20 years have changed the traffic patterns immensely from when the route was originally constructed almost 50 years ago. The typical section will be changed to eliminate the grass median which will bring the northbound and southbound traffic closer together.



Some of the service roads are being eliminated, while those being retained are being moved farther away from Burr Street. Additionally, access points near intersections are being eliminated to improve the safety of the corridor.



The Burr Street project was awarded this spring to T&R contracting for \$14,714,000. Subcontractors include Muth Electric, Commercial Asphalt, Bowes Construction, Traffic Solutions, H&W Contracting, DGR Engineering and Splitrock Landscaping.

A separate city of Mitchell project to make utility improvements was let in conjunction with this project.

The project inspection team for the SDDOT includes project engineer, Rick Brandner; project technician, Doug Endorf and journey technician, Ryan Degen.

The Burr Street project was split into three separate construction seasons due to the size of the project with the bulk of the work being completed in 2017 and 2018.

The 2017 construction begins immediately north of the I-90 ramps and continues north 3900-feet to Highway 38 (Havens Avenue).

The 2018 construction goes from the I-90 ramps 4000-feet south past the south Walmart approach.

The final completion date is June 15, 2019, to allow for completion of cleanup and durable pavement marking placement in 2019.

Traffic will be maintained on Burr Street for the duration of the project by placing two-way traffic on one set of lanes and completing one-half width of the roadway at a time. Business access will be maintained.

Project website: <http://www.sddot.com/travelers/projects/burrstreet/default.aspx>.

The traffic page on the website will give travelers information on how to navigate through the project, including some maps. Delays are expected to be minimal.

As you travel across the state this summer, don't be afraid to exit I-90 at Mitchell see the Corn Palace. Your travels through the Burr Street construction will be well worth it once you reach the world's largest bird feeder. It will be amaize-ing and bushels of fun!



## ***Access Rights Clairified in DOT Case***

*By Karla Engle, chief legal counsel*

The DOT Legal Office works on a variety of different lawsuits. Sometimes, the Legal Office is defending DOT and sometimes our office is bringing lawsuits on behalf of DOT.

Most DOT lawsuits involve condemnation cases, where DOT is acquiring property rights for a highway project. There are actually two kinds of condemnation cases: 1) the traditional eminent domain case, where DOT files suit to acquire property; and 2) the inverse condemnation case, where the landowner claims DOT took or damaged the landowner's property without paying the required compensation. Recently, the DOT Legal Office was involved in this second kind of case.

Let me tell you about it.

Carlyle Schliem owns a house just outside of the city limits of Sioux Falls. The house is located along 63rd Avenue, about 700 feet east of the busy thoroughfare of Cliff Avenue. Before DOT's recent I-90/Cliff Avenue reconstruction project, Schliem accessed his property by traveling through an intersection of Cliff Avenue and 63rd Street and driving east along 63rd Avenue to his house. When DOT built its project, DOT eliminated the Cliff Avenue/63rd Street intersection. The intersection was eliminated because it was too close to the interchange ramp, causing safety and efficiency problems. Before closing the intersection, DOT built a new road segment that connected 63rd Street to an existing street system to the east. So, after the project, instead of accessing his property from the west through the Cliff Avenue/63rd Street intersection, Schliem now accessed his property from the east through streets located in an industrial park. The new access route was longer for motorists coming from Interstate 90 or Cliff Avenue, but shorter for some motorists traveling from the east on the city street system.

Schliem sued DOT, claiming the new access route damaged his property. He asked DOT to pay him compensation of \$313,800, plus interest, for the diminished value of his property. He also sought reimbursement of his attorney fees and expert fees. DOT asked the trial court to throw out the case on the grounds that Schliem had no legal right to insist on a particular access route to his property. DOT argued

that Schliem still had a reasonable and useable access route to his property and therefore, couldn't complain if DOT closed an intersection over 700 feet away from his property and re-routed motorists to other streets to reach his home. The district court agreed with DOT and dismissed the case.

Schleim appealed to the South Dakota Supreme Court, arguing that: (1) there were disputed facts that should be reviewed by a jury; (2) the devaluation of his property alone is enough to prove a right to compensation; and (3) he had a legal right to the Cliff Avenue/63rd Street intersection.

The Supreme Court rejected each of Schliem's arguments and upheld the trial court's decision to throw out the case. In deciding the case in DOT's favor, the Supreme Court relied heavily on the fact that Schliem's land did not abut Cliff Avenue. The court acknowledged that landowners have special rights of access to streets that touch their property, but landowners usually can't claim the same rights in distant intersections. According to the Court, landowners generally cannot insist on a particular route through the street system to get to their property. The Court didn't completely rule out the possibility of compensation in other cases, but made clear that a landowner would have to show: (1) a substantial impairment of access; and (2) an injury different in kind, and not merely in degree, from the inconvenience sustained by the public when a favored travel route is lost. The Court concluded Schliem had failed to satisfy either of these requirements, noting the new access route functioned as well or better than the old route and the distance from Schliem's home to the nearest intersecting street was only about 100 feet longer after the project.

Consequently, the Court reasoned Schliem was not entitled to compensation, because he could not show the taking or damaging of a private property right of access.

The Supreme Court's handling of the issues raised by Carlyle Schliem, and its clarification of the test that applies in these cases, should be helpful to DOT and landowners as we confront access issues in the future.

## Hydraulic Section History of the Office of Bridge Design

By Steve Van Mullem, Bridge Design

As the South Dakota Department of Transportation celebrates its 100th anniversary, the Office of Bridge Design would like to share a little history on its Hydraulics Section.

The Hydraulics Section is responsible for providing a safe, efficient and effective means of conveying water throughout the transportation system. Designers are responsible for sizing culverts and bridges for large waterways on our state and federal highway system. Drainage structures (including erosion and scour countermeasures) are sized to prevent water from over-topping the roadway at specific flood frequencies, minimize flood impacts, address environmental concerns such as clean water and fish passage, and ensure stability of the highway embankment. Hydraulics assists the Office of Road Design by documenting drainage basin characteristics for the smaller drainages that can be used in the process of sizing smaller culverts. They also provide assistance to other government agencies including local governments, coordinate and comply with FEMA and the Corps. of Engineers regulations and review consultant work in addition to SDDOT department plan reviews.

In 1957, a Civil Engineering graduate from SDSU named Mansour Karim started the Hydraulics Section for the State of South Dakota Department of Highways in Pierre. This was at a time when highway standards had gone through several changes and new

design methods were being developed for drainage and hydraulic design. Through many hours of labor, Mansour prepared the first Drainage Manual for the department, which was approved in 1969. *Fun fact: A new SDDOT Drainage Manual was implemented for the Hydraulics Section in 2011 which took seven years to complete.* Mansour led the Hydraulics Section for 35 years and then passed on the leadership to Richard Phillips, who managed the crew for about 19 years. Since 2010, Kevin Marton has served as the Hydraulics Supervisor.

From 1957 until 2001, the Hydraulics Section had their own technicians to assist the engineers on drainage inspections and delineate watershed boundaries and basin slopes. The technicians were very helpful in an era where computer software was not available to do the time-consuming work using a hand planimeter and a scale for use on topographic maps.

From its beginning, 33 people have worked in the Hydraulics Section, including four women engineers. Some worked in Hydraulics for only a few months, while others worked up to 35 years.

Current employees of the Hydraulics Section are Kevin Marton, Steve Van Mullem, Andy Lampy, Ryley Rapp and Micah Baker. As long as there is a highway in use and water flows downhill, the Hydraulics Section should be around for many years to come.

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## Community Circle For Education



The 2017 Custer School District Community Circle Award recipients are CHS Math Dept. teachers Kathy Bradeen, Tim Elseman and Mindy Dooley (not pictured), and Tim Wicks, Custer Area Engineering Supervisor, of the South Dakota Department of Transportation.

L-R: Board member Heather Grace, Bradeen, **Wicks**, Elseman, and Board member Jeff Prior.

## DOT Pilots Help Fight Fires

By Ron Hauck, chief pilot

Did you know the South Dakota Department of Transportation is active in firefighting activities across the state? As it turns out, SDDOT employees play a major and vital role in the firefighting efforts for South Dakota as well as across the country.

In 2010, the State of South Dakota pilots started flying “Air Tactical Flights” in addition to passenger flights. Air Tactical Flights are aerial supervision performed over wildland fires located in forested and grassland areas. These aerial supervision flights have two main, very important, jobs - to manage airspace and to direct aerial firefighting aircraft and helicopters. Similar to what air traffic controllers do at commercial airports only in the air instead of on the ground.

First let's talk about the aircraft used when fighting fires, then we'll talk about the pilots and the extensive training they go through.

Firefighting aircraft can include everything from single engine tankers up to the very large tankers such as the DC-10 (photo) and Boeing 747. Other duties of the Air Tactical Aircraft include helping fire supervision, size-up, prioritization and coordinating the response of aerial and ground firefighting resources.

The aircraft also serve as the communication link between responding ground personal and incident aircraft. In remote areas, the aircraft can provide directions to fire personnel on the ground for the fastest access to the fire. One of the most important duties of the aerial supervisor aircraft is to be the eyes in the sky to watch out for the safety of firefighters on the ground.



Prior to flying fires, aircraft are equipped with special radios. The U.S. Forest Service (USFS) does an annual inspection of the aircraft. All pilots who fly fires attend training sessions that include topics on fire management, fire weather, fire safety and air tanker procedures. After the training, the pilots must pass check rides administered by USFS pilots. The training helps mitigate some of the hazards encountered during the flights. Often flights are at low altitude in smoky conditions which limit visibility in rough mountainous terrain.



Due to the extreme drought in 2012, an state plane was on fire duty more than 100 days. Fire duty in 2016 was more than 50 days. Typically most fire missions the department assists in are in South Dakota, but, when needed, SDDOT aircraft have worked all over the country in places like Washington, Colorado, Wyoming, Idaho and other western states. Until called out for fire duty, the location and length of a mission is unknown. Because of the department's other flight mission, passenger transportation, this can present some scheduling challenges. The upside is that revenue from the fire missions helps to keep rates lower for passenger flights.

The aircraft have proven valuable in helping with firefighter safety and keeping fires small with a quick response time. Getting fires under control quickly keeps them smaller and creates a cost savings not only for the agencies responsible for the fires but also for the citizens of South Dakota.

### White Draw Fire - 2012

Photos provided by Ron Hauck

## ***New Employees / Transfers / Promotions March & April 2017***

Cook, Justin	Engineer II	Pierre	Lateral Transfer
Kamarainen, Steve	Engineer IV	Rapid City	Promotion
Suomala, Jon	Engineering Manager I	Rapid City	Promotion
Cross, James	Highway Maint. Worker	Woonsocket	New Hire
Gregg, Logan	Journey Transp. Technician	Pierre	New Hire
Pollard, Ryan	Engineer I	Pierre	New Hire
Schneider, Steven	Highway Maint. Supervisor	Sioux Falls	Promotion
Hoyt, Mary	Accountant I	Pierre	Promotion
Livermont, Andrew	Journey Transp. Technician	Pierre	Lateral Transfer
Neville, Luke	Lead Highway Maint. Worker	Philip	Promotion
Whitford, Craig	Highway Maint. Worker	Rapid City	New Hire
Nelson, Robert	Highway Maint. Worker	Buffalo	New Hire
Theunissen, Steven	Highway Maint. Worker	Rapid City	New Hire
Bramblee, Kit	Environment Scientist II	Pierre	New Hire
McManigal, Dan	Highway Maint. Worker	Presho	New Hire
Flad, Scott	Highway Maint. Worker	Gettysburg	New Hire
Carnahan, Bridget	Environmental Scientist III	Pierre	New Hire

## ***Longevity / Retirements***

Scott Schneider	30	Aberdeen Region
Jeff Gustafson	30	Mitchell Region
Marilyn Patterson	40	Project Development
Bryce Olson	20	Watertown
Joan Hakeman	20	Watertown
Tim Boehmer	25	Sioux Falls
Dana Feltis	40	Bridge
Doug Kinniburgh	25	LGA



Rich Harding's retirement lunch with his Flandreau/Madison shops

Pictured left to right: Chris Voelker, Jim Eng, Josh Weber, Casey Veenhof, Steve Schneider, Mark Anderson, John Burshiem, Travis Dressen, Nels Nelson, Rich Harding, Bruce Kramer, Tate Anderson

### ***Babies!***



Tim Huffman, Highway Maintenance Supervisor in Murdo, became a grandfather for the fourth time to

**Camdyn Isaiah Huffman**

DOB: Feb. 15, 2017

Length: 11.75 inches

Weight: 1.3 pounds

Camdyn's parents are Curtis and Casey Huffman of Mobridge. He joins older brother, Corbin.