

STATE OF	PROJECT	SHEET	TOTAL
SOUTH DAKOTA	P SRTS (38)	1	65
Disting Dates	A		

Rev 12/11/15 MDN

INDEX OF SHEETS

1	General Layout W/Index
2-9	Estimate of Quantities and Notes
10	Pipe Table
11	Fence Table
12-13	Typical Sections
14	Horizontal Alignment Sheet
15	Control Data
16	Symbology Legend
17	Landowner Table
18	Signage Table
19	Traffice Control Sheet
20-31	Plan & Profile Sheets
32-37	Curb & Gutter Layouts
38-43	Curb Ramp Details
44-49	Erosion Control Sheets
50 - 53	Pavement Marking Sheets
54-55	Special Detail
56-65	Standard Plates

END P SRTS(38)

Approximately 369' East and 1283.5' North of the Northwest corner of Section 30-T91N-R49W.



T 91 N

Estimate of Quantities

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
009E3230	Grade Staking	0.272	Mile
009E3220	Reestablish Property Corner	12	Each
100E0020	Clear and Grub Tree	21	Each
100E0100	Clearing	Lump Sum	15
110E0010	Clear and Grub Stump	1	Each
110E0600	Remove Fence	173	Ft
110E1100	Remove Concrete Pavement	32.6	SaYd
110E1110	Remove Concrete Approach Pavement	106.6	SaYd
110E1130	Remove Concrete Driveway Pavement	100.0	SaVd
110E1140	Remove Concrete Sidewalk	93.1	SaYd
110E7802	Remove Consider Sladewalk	50	Et
12050010		630	
120E0010		032	Curd
230E0010	Placing Topsoli	329	
250E0020	Read Course		LO
200E1010	Base Course	20.0	
380E1000	6 Miscellaneous PCC Pavement	31.5	Sqra
380E3020	6 PCC Driveway Pavement	157.5	Sqra
360E3520	6 PCC Approach Pavement	04.0	5910
450E3002	18 RCP Arch Class 2, Furnish	30	Ft Ft
450E3010	18 RCP Arch, Install	30	Fl
450E4500	18 RCP Arch Flared End, Furnish	3	Each
450E4501	18" RCP Arch Flared End, Install	3	Each
451E6080	Adjust Water Valve Box	3	Each
464E0200	Controlled Density Fill	2.6	CuYd
620E0050	Type 5 Right-Of-Way Fence	1/3	<u>- Ft</u>
620E1020	2 Post Panel	1	Each
620E4100	Reset Fence	49	Ft
632E3520	Remove, Salvage, Relocate, and Reset Traffic Sign	5	Each
633E1430	Pavement Marking Paint, 24" White	477	Ft
633E1440	Pavement Marking Paint, Area	11	SqFt
634E0100	Traffic Control Signs	192	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
651E0040	4" Concrete Sidewalk	12314.9	SqFt
651E0060	6" Concrete Sidewalk	1188.4	SqFt
651E3000	Grinding Miscellaneous Concrete	69.9	SqFt
651E7000	Type 1 Detectable Warnings	150	SqFt
730E0206	Type D Permanent Seed Mixture	176	Lb
731E0100	Fertilizing	851	Lb
732E0250	Fiber Mulching	1724	Lb
734E0103	Type 3 Erosion Control Blanket	31	SqYd
734E0604	High Flow Silt Fence	100	Ft
734E0620	Repair Silt Fence	25	Ft
734E0847	Sediment Control at Type S Reinforced Concrete Drop Inlet	12	Ft
734E5010	Sweeping	5	Hour
735E1340	4' Coniferous Evergreen, Furnish and Plant	7	Each
735E2220	2" Caliper Deciduous Tree, Furnish and Plant	5	Each
900E1310	Concrete Washout Facility	1	Each
900E5153	Mulch Ring	12	Each

SPECIFICATIONS

Standard Specifications for Roads and Bridges, 2015 Edition and Required Provisions, Supplemental Specifications, and Special Provisions as included in the Proposal.

ENVIRONMENTAL COMMITMENTS

An Environmental Commitment is a measure that SDDOT commits to implement in order to avoid, minimize, and/or mitigate a real or potential environmental impact. Environmental commitments to various agencies and the public have been made to secure approval of this project. An agency mentioned below with permitting authority can influence a project if perceived environmental impacts have not been adequately addressed. Unless otherwise designated, the Contractor's primary contact regarding matters associated with these commitments will be the Project Engineer. These environmental commitments are not subject to change without prior written approval from the SDDOT Environmental Office. The environmental commitments associated with this project are as follows:

COMMITMENT C: WATER SOURCE

The Contractor shall not withdraw water with equipment previously used outside the State of South Dakota without prior approval from the SDDOT Environmental Office. Thoroughly wash all construction equipment before entering South Dakota to reduce the risk of invasive species introduction into the project vicinity.

The Contractor shall not withdraw water directly from streams of the James, Big Sioux, and Vermillion watersheds without prior approval from the SDDOT Environmental Office.

Action Taken/Required:

The Contractor shall obtain the necessary permits from the regulatory agencies such as the Department of Environment and Natural Resources (DENR) and the United States Army Corps of Engineers (COE) prior to executing water extraction activities.

COMMITMENT E: STORM WATER

Construction activities constitute less than 1 acre of disturbance.



Action Taken/Required:

At a minimum and regardless of project size, appropriate erosion and sediment control measures must be installed to control the discharge of pollutants from the construction site.

COMMITMENT H: WASTE DISPOSAL SITE

The Contractor shall furnish a site(s) for the disposal of construction and/or demolition debris generated by this project.

Action Taken/Required:

State ROW.

The waste disposal site(s) shall be managed and reclaimed in accordance with the following from the General Permit for Highway, Road, and Railway Construction/Demolition Debris Disposal Under the South Dakota Waste Management Program issued by the Department of Environment and Natural Resources.

The waste disposal site(s) shall not be located in a wetland, within 200 feet of surface water, or in an area that adversely affects wildlife, recreation, aesthetic value of an area, or any threatened or endangered species, as approved by the Project Engineer.

If the waste disposal site(s) is located such that it is within view of any ROW, the following additional requirements shall apply:

Construction and/or demolition debris consisting of concrete, 1. asphalt concrete, or other similar materials shall be buried in a trench completely separate from wood debris. The final cover over the construction and/or demolition debris shall consist of a minimum of 1 foot of soil capable of supporting vegetation. Waste disposal sites provided outside of the State ROW shall be seeded in accordance with Natural Resources Conservation Service recommendations. The seeding recommendations may be obtained through the appropriate County NRCS Office. The Contractor shall control the access to waste disposal sites not within the State ROW through the use of fences, gates, and placement of a sign or signs at the entrance to the site stating "No Dumping Allowed".

2. Concrete and asphalt concrete debris may be stockpiled within view of the ROW for a period of time not to exceed the duration of the project. Prior to project completion, the waste shall be removed from view of the ROW or buried and the waste disposal site reclaimed as noted above.

The above requirements will not apply to waste disposal sites that are covered by an individual solid waste permit as specified in SDCL 34A-6-58, SDCL 34A-6-1.13, and ARSD 74:27:10:06.

1.31.

All costs associated with furnishing waste disposal site(s), disposing of waste, maintaining control of access (fence, gates, and signs), and reclamation of the waste disposal site(s) shall be incidental to the various contract items.

	STATE OF	PROJECT	SHEET	TOTAL
SOUTH DAKOTA	SOUTH DAKOTA	P SRTS (38)	2	65

Construction and/or demolition debris may not be disposed of within the

Failure to comply with the requirements stated above may result in civil penalties in accordance with South Dakota Solid Waste Law, SDCL 34A-6-

COMMITMENT I: HISTORICAL PRESERVATION OFFICE CLEARANCES

The SDDOT has obtained concurrence with the State Historical Preservation Office (SHPO or THPO) for all work included within the project limits and all department designated sources and designated option material sources, stockpile sites, storage areas, and waste sites provided within the plans.

Action Taken/Required:

All earth disturbing activities not designated within the plans require review of cultural resources impacts. This work includes, but is not limited to: staging areas, borrow sites, waste disposal sites, and all material processing sites.

The Contractor shall arrange and pay for a cultural resource survey and/or records search. The Contractor has the option to contact the state Archaeological Research Center (ARC) at 605-394-1936 or another gualified archaeologist, to obtain either a records search or a cultural resources survey. A record search might be sufficient for review; however, a cultural resources survey may need to be conducted by a gualified archaeologist.

The Contractor shall provide ARC with the following: a topographical map or aerial view on which the site is clearly outlined, site dimensions, project number, and PCN. If applicable, provide evidence that the site has been previously disturbed by farming, mining, or construction activities with a landowner statement that artifacts have not been found on the site.

The Contractor shall submit the records search or cultural resources survey report and if the location of the site is within the current geographical or historic boundaries of any South Dakota reservation to SDDOT Environmental Engineer, 700 East Broadway Avenue, Pierre, SD 57501-2586 (605-773-3180). SDDOT will submit the information to the appropriate SHPO/THPO. Allow 30 Days from the date this information is submitted to the Environmental Engineer for SHPO/THPO review.

If evidence for cultural resources is uncovered during project construction activities, then such activities shall cease and the Project Engineer shall be immediately notified. The Project Engineer will contact the SDDOT Environmental Engineer in order to determine an appropriate course of action.

SHPO/THPO review does not relieve the Contractor of the responsibility for obtaining any additional permits and clearances for staging areas, borrow sites, waste disposal sites, or material processing sites that affect wetlands. threatened and endangered species, or waterways. The Contractor shall provide the required permits and clearances to the Project Engineer at the preconstruction meeting.

GRADING OPERATIONS

Water for Embankment is estimated at the rate of 10 gallons of water per cubic yard of Embankment minus Waste. No separate payment will be made for the Water for Embankment and all costs associated shall be incidental to the contract unit price per cubic vard of "Unclassified Excavation".

UTILITIES

The Contractor shall be aware that the existing utilities shown in the plans were surveyed prior to the design of this project and might have been relocated or replaced by a new utility facility prior to construction of this project, might be relocated or replaced by a new utility facility during the construction of this project, or might not require adjustment and may remain in its current location. The Contractor shall contact each utility owner and confirm the status of all existing and new utility facilities. The utility contact information is provided elsewhere in the plans or bidding documents.

CLEARING

Before clearing activities begin, the Contractor shall contact the Engineer to determine the limits of clearing for the project. If the trees or shrubs that are supposed to remain within the limits of work are damaged or destroyed by the Contractor, the Contractor shall replace them with the same size and type at the Contractor's expense.

Included in this bid item are the following trees:

CLEARING

32+60 - 24' R 33+36 - 27' R

CLEAR AND GRUB TREE

The Contractor shall remove the trees in the table below. All costs to completely remove and dispose of each tree and stump shall be incidental to the contract unit price per each for "Clear and Grub Tree".

If additions or reductions to the number of trees removed are ordered by the Engineer, payment shall be made at the contract unit price per each for "Clear and Grub Tree."

ENG/M

KIM LaRUE

TABLE OF CLEAR AND GRUB TREE

6+59 - 25' L	32+74 - 23' R
7+32 - 24' L	33+15 - 30' R
9+63 - 34' L	33+15 - 25' R
9+83 - 33' L	33+34 - 30' R
12+26 - 29' L	33+34 - 24' R
12+46 - 28' L	34+35 - 31' R
15+91 - 25' L	35+98 - 25' R
31+68 - 28' R	36+27 - 27' R*
31+84 - 31' R*	37+90 - 28' R
32+08 - 30' R	38+13 - 28' R
32+26 - 26' R	38+36 - 28' R
32+33 - 27' R	
* Removed By Ot	hers

TABLE OF CLEAR AND GRUB STUMP 18+49 - 30' L

TABLE OF EXCAVATION QUANTITIES BY BALANCES

			Total	**
		Excavation	Excavation	Waste
Station	Station			
to		(CuYd)	(CuYd)	(CuYd)
1+87	8+04	203	203	189
8+40	11+29	2	2	-3
11+64	16+75	28	28	5
17+05	19+86	60	60	59
30+70	35+12	4	4	0
35+61	37+48	3	3	0
37+71	41+38	3	3	0
	TOTALS:	303	303	250

** The quantities for these items are for information only.

TABLE OF UNCLASSIFIED EXCAVATION

Excavation Topsoil

QUANTITY

The Topsoil quantity in the Table of Unclassified Excavation is an estimate. The quantity of Topsoil from the cuts will be paid for twice as Unclassified Excavation, as it will be in both the Excavation and Topsoil quantities. This will be full compensation for Excavation, which includes necessary undercutting to provide space for placement of topsoil.

The Excavation guantities from individual balances and the Table of Unclassified Excavation have been reduced by the volume of in place surfacing that will be removed.

Excavation quantities for Concrete Sidewalk have not been included in the Unclassified Excavation, Excavation for the concrete sidewalk shall be incidental to the sidewalk bid item.

STATE OF	PROJECT	SHEET	TOTAL SHEETS
SOUTH DAKOTA	P SRTS (38)	3	65

REV 12/11/15 MDN

SHRINKAGE FACTOR: Embankment +20%

	(CuYd)
	303
	329
Total:	632

PROCEDURES FOR DETERMINING UNCLASSIFIED EXCAVATION

Plans quantity shall be the basis of payment for Unclassified Excavation.

INCIDENTAL WORK, GRADING

The following is a list of major items of Incidental Work:

- 1.) Curb Stop Sleeves: There are a number of curb stops located in the proposed concrete. These curb stops will be required to have a White 5" PVC sleeve installed around them and shall be adjusted to approximately 0.5" below finish concrete elevation. The contractor shall take care not to damage any existing curb stops.
- 2.) Mailboxes: It is not expected that any existing mailboxes will be affected, but if due to the Contractors activities mailboxes are affected it shall be removed, safeguarded through construction, and reset at the correct height and location behind the curb and gutter following construction completion.
- 3.) Sprinklers: The Home Owner and Engineer shall locate sprinklers before construction begins. Review locations of known sprinklers on plans sheets. The Contractor shall safeguard any sprinklers systems in the ROW during construction if possible. There may be locations along the project where sprinkler systems will be encountered during construction. The Contractor shall repair any damaged sprinkler systems to the extent that the functionality of the sprinkler system is retained after the project is complete at no additional cost to the owner. Where replacement is necessary, the existing system shall be replaced with the appropriate materials. All costs associated with the repair and replacement of the sprinkler system shall be incidental the contract lump sum price for "Incidental Work, Grading."

TABLE OF INCIDENTAL WORK, GRADING

Station to	Station	Remarks
13+42 - 20' L	13+42 - 26' L	Take out 18" Arch Flared End – 1 Each
13+45 - 20' L	13+45 - 26' L	Take out 18" Arch Flared End – 1 Each
13+49 - 20' L	13+49 - 26' L	Take out 18" Arch Flared End – 1 Each

TABLE OF CONCRETE PAVEMENT REMOVAL

				Quantity
Station	to	Station	L/R	(SqYd)
3+61.8		3+67.4	L	13
13+39.5		13+50.2	L	19.6
			Total:	32.6



TABLE OF CONCRETE APPROACH PAVEMENT REMOVAL

				Quantity
Station	to	Station	L/R	(SqYd)
14+05.6		14+21.4	L	23.2
15+73.1		15+87.8	L	22.3
38+95.7		39+37.5	R	61.1
			Total [.]	106.6

TABLE OF CONCRETE DRIVEWAY PAVEMENT REMOVAL

				Quantity
Station	to	Station	L/R	(SqYd)
5+81.4		6+05.4	L	26.7
14+17.2		14+27.8	L	29.0
38+95.7		39+37.6	R	46.6
			Total [.]	102.3

TABLE OF SIDEWALK REMOVAL

				Quantity
Station	to	Station	L/R	(SqYd)
14+24.0		14+35.6	L	2.7
16+23.2		16+25.7	L	1.4
17+98.1		18+02.0	L	4.4
18+59.1		19+86.0	L	65.1
31+45.3		31+49.0	L	19.5
			Total	03.1

TABLE OF GRINDING MISCELLANEOUS CONCRETE

		Quantity
Station to	Station	(SqFt)
7+99.3 - 21.0' L	8+03.9 - 30.0' L	5.2
8+40.5 - 29.0' L	8+45.8 - 21.0' L	5.4
11+23.8 - 21.0' L	11+28.8 - 30.0' L	5.3
11+64.8 - 30.0' L	11+69.7 - 21.0' L	5.2
13+93.1 - 16.6' L	13+99.1 - 16.6' L	3.0
14+19.4 - 16.5' L	14+43.1 - 16.3' L	11.8
16+71.5 - 21.0' L	16+74.5 - 30.0' L	4.8
17+05.5 - 30.0' L	17+08.4 - 21.0' L	4.8
35+21.3 - 22.0' R	35+25.5 - 31.0' R	5.1
35+61.0 - 31.0' R	35+64.9 - 22.0' R	5.0
37+44.7 - 22.0' R	37+47.3 - 31.0' R	4.8
37+71.0 - 31.0' R	37+73.7 - 22.0' R	4.8
41+35.7 - 22.0' R	41+38.1 - 31.0' R	4.7
	Total:	69.9

CONTROLLED DENSITY FILL FOR PIPE

design shall be one of the following:

Mate

Portland Cement Fine Aggregate Coarse Aggregate Water Fly Ash, Type C

Or alternative mix design with CLSM (Controlled Low Strength Material):

Mat

Portland Cement Fine Aggregate Coarse Aggregate Water

> "W.R. Grace - Da approved equal

The fine aggregate shall be natural sand consisting of mineral aggregate particles conforming to the following gradation requirements:

> Passing 3/8 Inch Sieve 100% Passing No. 200 Sieve 0-10%

Both of the mix designs shown above are designed to produce a minimum compressive strength of 100 psi. The Engineer may allow adjustments to the proportion of water at the site to provide the necessary consistency of the mix.

Controlled density fill shall be contained within the required limits with sandbags or other methods approved by the Engineer.

The Contractor shall prevent the flotation or movement of the culvert due to the buoyant force from the controlled density fill until the controlled density fill hardens. Overlying surfacing materials shall not be placed sooner than four hours after placement of the controlled density fill.

All costs for furnishing and installing the controlled density fill, including sandbags, labor, materials, equipment and incidentals necessary to complete the work shall be included in the contract unit price per cubic yard for "Controlled Density Fill."

the Engineer.

Station	
13+43.4	
13+46.9	
	Tota

STATE OF	PROJECT	SHEET	TOTAL
SOUTH DAKOTA	P SRTS (38)	4	65

Controlled density fill shall be a flowable mortar material. Materials shall be in accordance with the Specifications, except as modified below. The mix

erial	Rate per Cubic Yard
Type I, II, III, or V	100 Lb
	2600 Lb
e	None
	60 Gal
	300 Lb

terial	Rate per Cubic Yard
Type I, II, III, or V	200 Lb
	2600 Lb
9	None
	35 Gal
arafill" or	1 (3 oz.) capsule or equivalent *

* Shall be one 3 ounce capsule or equivalent CLSM performance additive (foaming admixture).

Plans quantity will be the basis for payment unless otherwise ordered by

	Quantity	Fill Height
	(CuYd)	(between pipes)
	1.29	20 inches
	1.29	20 inches
al:	2.6	-

CONCRETE PIPE CONNECTIONS

Pipe connections to existing pipes, manholes, junction boxes, and drop inlets shall be done by breaking a hole into the existing structure and inserting the pipe. A concrete collar shall then be poured around the pipe in the area of the connection.

When it is not possible to use a normal pipe joint (male-female ends), connections to existing pipe shall be made by placing a 2' wide by 6" thick M6 concrete collar around the outside of the connection. The concrete collar shall be reinforced with 6x6 W2.9 x W2.9 wire mesh.

All costs for constructing the concrete collars including materials and labor shall be incidental to the contract unit price per foot for the corresponding pipe bid item.

STORM SEWER

Reinforced concrete pipe may be either bell and spigot or tongue and groove. The pipe sections shall be adjoined such that the ends are fully entered and the inner surfaces are reasonably flush and even.

Lift holes in the reinforced concrete pipe shall be plugged with grout.

Gaskets and seals (mastic, waterstop, and seal wraps) shall be installed in accordance with the manufacturer's recommendations.

The cost for furnishing and installing all gaskets, mastic joint seal, waterstop seal, seal wrap, concrete collars, and for plugging the lift holes shall be incidental to the contract unit price per foot for the co pipe bid item.

TABLE FOR ADJUSTMENT OF WATER VALVE BOX

Station	Adjustment
16+67.5 - 28.45' R	0.17
39+24.3 - 21.66' R	-0.13
40+29.0 - 24.54' R	-0.21

SIDEWALK

The foundation shall be excavated, shaped, and compacted to a firm, uniform bearing surface. Unsuitable foundation material shall be removed and replaced as directed. The foundation shall be thoroughly moistened immediately prior to placing concrete.

Concrete sidewalk will be paid for at the contract unit price per square foot.

Payment will be full compensation for excavation other than removal of existing sidewalk as provided for under Section 110 of the Specifications.

Payment will be full compensation for labor, equipment, tools, backfilling, furnishing and placing materials, including granular material, preformed expansion joint material and incidentals necessary, including disposal of excavation and discarded materials.

orresponding	<u> TABLE OF 6" PC</u>
111172	
L ENGINE	Station to
	3+62.8 - 24.7' L
REG. NO . R.VA	5+81.5 - 28.0' L
5801	13+35.3 - 28.0' L
M LaRUE	15+58.7 - 28.0' L
ICLAURY : 5	18+14.9 - 28.0' L
2-01-15 20	18+50.7 - 28.0' L
E To Town	18+99.1 - 28.0' L
OTHDARS OF A	30+72.3 - 14.9' R
* 2	31+51.5 - 29.0' R

nm FM Souri

Station to	Station	(SqFt)
1+87.3 - 46.9' L	3+62.8 - 34.7' L	1076.3
3+70.7 - 23.5' L	5+81.5 - 28.0' L	830.0
6+05.6 - 28.0' L	8+03.9 - 30.0' L	1002.7
8+40.3 - 30.0' L	11+28.8 - 30.0' L	1464.3
11+64.8 - 30.0' L	13+35.3 - 28.0' L	863.9
13+54.7 - 28.0' L	13+99.1 - 21.6' L	225.9
13+37.1 - 21.3' L	15+58.7 - 28.0' L	612.3
15+88.7 - 28.0' L	16+74.5 - 30.0' L	435.4
17+05.5 - 30.0' L	18+14.9 - 28.0' L	580.9
18+26.2 - 28.0' L	18+50.7 - 28.0' L	122.6
18+59.6 - 38.0' L	18+99.1 - 28.0' L	245.3
19+15.5 - 28.0' L	19+86.0 - 28.9' L	357.6
30+73.9 - 0.2' L	30+74.1 - 1.0' L	6.2
30+72.3 - 14.9' R	30+99.3 - 29.0' L	165.4
31+33.7 - 29.0' R	31+51.5 - 29.0' R	168.7
31+45.3 - 21.56' L	31+49.0 - 21.6' R	65.7
31+66.5 - 29.0' R	32+75.9 - 29.0' R	552.8
32+87.5 - 29.0' R	33+90.9 - 29.0' R	510.8
34+23.8 - 29.0' R	35+25.5 - 31.0' R	491.0
35+61.0 - 31.0' R	37+47.3 - 31.0' R	958.5
37+71.0 - 31.0' R	38+95.7 - 29.0' R	636.9
39+37.5 - 29.0' R	41+38.1 - 31.0' R	941.7
	Total:	12314.9

Quantity

...

CC SIDEWALK

TABLE OF 4" PCC SIDEWALK

		Quantity
Station to	Station	(SqFt)
3+62.8 - 24.7' L	3+70.7 - 23.5' L	57.5
5+81.5 - 28.0' L	6+05.6 - 28.0' L	120.5
13+35.3 - 28.0' L	13+54.7 - 28.0' L	96.7
15+58.7 - 28.0' L	15+88.7 - 28.0' L	150.0
18+14.9 - 28.0' L	18+26.2 - 28.0' L	56.4
18+50.7 - 28.0' L	18+59.4 - 28.0' L	43.7
18+99.1 - 28.0' L	19+15.5 - 28.0' L	82.1
30+72.3 - 14.9' R	30+73.9 - 0.2' L	73.9
31+51.5 - 29.0' R	31+66.5 - 29.0' R	75.0
32+75.9 - 29.0' R	32+87.5 - 29.0' R	58.1
33+90.9 - 29.0' R	34+23.8 - 29.0' R	164.9
38+95.7 - 29.0' R	39+37.5 - 29.0' R	209.6
	Total:	1188.4

TYPE 1 DETECTABLE WARNINGS

Detectable warnings shall be in compliance with the Americans with Disability Act regulations.

The detectable warnings shall be installed according to the manufacturer's installation instructions.

A concrete thickness equal to the adjacent concrete sidewalk thickness and 2 inches of granular cushion material shall be placed below the Type 1 Detectable Warnings. When concrete is placed below the detectable warnings then the concrete thickness shall be transitioned at the rate of 1" per foot to match the adjacent concrete sidewalk thickness.

The detectable warnings shall be a brick red color for application in concrete curb ramps. Cast iron plates may be a natural patina (weathered steel).

Warnings table.

Product

Detectable Warni Cast Iron Pla

Detectable Warning Plate Cast Iron Plate

Detectable Warni Cast Iron Plate Coating)

Station to	Station	Quantity (SgFt)
7+99.1 - 23.0' L	7+99.1 - 28.0' L	10.0
8+45.7 - 23.0' L	8+45.7 - 28.0' L	10.0
11+23.8 - 23.0' L	11+23.8 - 28.0' L	10.0
11+69.8 - 23.0' L	11+69.8 - 28.0' L	10.0
16+70.8 - 23.0' L	16+70.8 - 28.0' L	10.0
17+09.1 - 23.0' L	17+09.1 - 28.0' L	10.0
30+97.3 - 24.0' R	30+97.3 - 29.0' R	10.0
31+44.6 - 10.6' L	31+49.6 - 10.6' L	10.0
31+44.6 - 22.3' R	31+49.6 - 22.3' R	10.0
31+36.1 - 24.0' R	31+36.1 - 29.0' R	10.0
32+21.0 - 24.0' R	35+21.0 - 29.0' R	10.0
35+62.2 - 24.0' R	35+65.2 - 29.0' R	10.0
37+43.7 - 24.0' R	37+43.7 - 29.0' R	10.0
37+74.6 - 24.0' R	37+74.6 - 29.0' R	10.0
41+34.7 - 24.0' R	41+34.7 - 29.0' R	10.0
	Total:	150.0

	STATE OF	PROJECT	SHEET	TOTAL SHEETS
SOUTH DAKOTA	P SRTS (38)	5	65	

When Type 1 Detectable Warnings are specified, the Contractor shall furnish and install only one of the products listed in the Type 1 Detectable

Type 1 Detectable Warnings

Manufacturer

ng Plate	Neenah Foundry Company
ate	Neenah, WI
	800-558-5075
	http://www.neenahfoundry.com/

Deeter Foundry Lincoln. NE 800-234-7466 http://www.deeter.com/

ing Plate	East Jordan Iron Works, Inc.
e(No	301 Spring Street
	East Jordan, MI 49727
	800-626-4653
	http://www.ejiw.com

TABLE OF TYPE 1 DETECTABLE WARNINGS

BASE COURSE

Base Course shall be placed in the locations indicated on the plans, at a compacted depth of 6 inches. The bid item for Base Course is for all work associated to furnish and install the gravel in accordance with Section 260 of the Specifications.

TABLE OF GRAVEL BASECOURSE

		Quantity	Quantity
Station to	Station	(SqFt)	(Tons)
18+14.6 - 38.0' L	18+24.5 - 38.0' L	104	3.54
18+51.1 - 38.0' L	18+59.6 - 38.0' L	83	2.82
18+98.9 - 33.0' L	19+16.2 - 33.0' L	85	2.89
30+72.5 - 0.5' R	30+71.2 - 14.6' R	18	0.61
30+83.9 - 0.9' R	30+82.2 - 16.1' R	76	2.58
31+51.5 - 24.0' R	31+66.5 - 24.0' R	97	3.32
31+51.5 - 33.5' R	31+66.4 - 33.4' R	66	2.23
32+73.6 - 34.0' R	32+85.1 - 34.0' R	58	1.97
	Total:	587	19.96

TABLE OF CONSTRUCTION STAKING

(See Special Provision for Contractor Staking)

					Gra	ide Staking		
oadway and Description	Begin Station	End Station	Number of Lanes	Length (Ft)	Length (Mile)	Lane Factor	*Sets of Stakes	**Grade Staking Quantity (Mile)
Court Street	1+87	19+86	1	1,799	0.341	0.5	1	0.171
Dupont Street	30+70	41+38	1	1068	0.202	0.5	1	0.101
							Totals:	0.272

* 1 = Blue Top Stakes Only (Sidewalk)

** Grade Staking Quantity = (Length) x (Lane Factor) x (Sets of Stakes)

REESTABLISH PROPERTY CORNER

12 possible locations have been identified, exact locations will be determined in the field.

The Contractor shall have a Licensed Land Surveyor in the State of South Dakota Reestablish Property Corners in 12 locations. The Land Surveyor shall preserve the location and reestablish all corners in accordance with South Dakota DOT Survey Manual, Chapter 8 Section J – Marking of Public Land Corners.

http://sddot.com/business/design/docs/survey/smchap8.pdf

TABLE OF 6" PCC APPROACH PAVEMENT

)
1
9
8
8

TABLE OF 6" PCC DRIVEWAY PAVEMENT

		Quantity
Station to	Station	(SqYd)
5+81.4 - 33.0' L	6+05.4 - 33.0' L	13.3
14+17.2 - 48.7' L	14+27.8 - 43.3' L	40.4
14+39.3 - 51.7' L	14+50.0 - 46.2' L	41.4
33+90.8 - 33.2- R	34+23.8 - 33.5' R	15.8
38+95.7 - 39.0' R	39+37.6 - 39.0' R	46.6
	Total:	157.5

6"	M	IS	CE	LL	A	١E	(

TABLE OF 6" MISCELLANEOUS PCC PAVEMENT

Station to	Station	Quantity (SqYd)
3+61.9 - 27.3' L	3+67.4 - 31.6' L	6.6
13+33.4 - 16.9' L	13+56.5 - 16.8' L	14.3
13+39.0 - 34.6' L	13+51.3 - 34.6' L	10.6
	Total:	31.5

TABLE OF REESTABLISH PROPERTY CORNERS

Station	Туре	Northing	Easting
2+03.4 - 37.1' L	5/8" Rebar	15510404.954	2262376.119
13+69.7 - 30.2' L	5/8" Rebar	15511512.607	2262230.954
16+61.6 - 30.1' L	Rebar W/Cap - GFF	15511804.470	2262224.224
17+21.6 - 29.5' L	Rebar W/Cap - 3236	15511864.432	2262223.431
18+96.5 - 29.9' L	Rebar W/Cap - 3236	15512039.319	2262218.970
20+21.4 - 30.0' L	5/8" Rebar	15512164.125	2262215.955
35+70.8 - 30.1' R	5/8" Rebar	15511805.327	2262284.861
36+61.0 - 30.0' R	5/8" Rebar	15511806.836	2262374.976
37+46.9 - 30.0' R	Rebar W/Cap - 3236	15511808.236	2262460.914
38+54.9 - 30.0' R	Rebar W/Cap - 3236	15511809.935	2262568.933
40+17.1 - 30.0' R	Rebar W/Cap - 3236	15511812.521	2262731.101
41+25.6 - 30.0' R	Rebar W/Cap - 3236	15511795.177	2262818.090

STATE OF	PROJECT	SHEET	SHEETS
SOUTH DAKOTA	P SRTS (38)	6	65

OUS PCC PAVEMENT

Rev 12/11/15 MDN

All concrete for 6" Miscellaneous PCC Pavement shall be Class M-6 as detailed in the SDDOT Standard Specifications.

All costs for 6" Miscellaneous PCC Pavement shall be incidental to the contract unit price per SqYd for "6" Miscellaneous PCC Pavement".



PLACING TOPSOIL

The thickness will be approximately 4 inches within the right-of-way and 6 inches on temporary easements. The topsoil thickness from Station 9+84.3 to Station 11+28.8 shall be approximately 8 inches.

The estimated amount of topsoil to be placed is 329 CuYd.

MYCORRHIZAL INOCULUM

Mycorrhizal inoculum shall consist of mycorrhizal fungi spores and mycorrhizal fungi-infected root fragments in a solid carrier. The carrier may include organic materials, calcinated clay, or other materials consistent with application and good plant growth. The supplier shall provide certification of the fungal species claimed and the live propagule count. The inoculum shall include the following fungal species:

Glomus intraradices	25%
Glomus aggregatu	25%
Glomus mosseae	25%
Glomus etunicatum	25%

All seed shall be inoculated by the seed supplier with a minimum of 20,000 live propagules of mycorrhizal fungi per 1,000 square feet. All costs of inoculating the seed shall be incidental to the contract unit price per pound for the corresponding permanent seed mixture.

The mycorrhizal inoculum shall be from the list below or an approved equal:

<u>Product</u>

MycoApply

Manufacturer

Mycorrhizal Applications, Inc. Grants Pass, OR Phone: 1-866-476-7800 http://www.mycorrhizae.com/

FERTILIZING

The Contractor shall apply an all-natural slow release fertilizer prior to seeding or placing sod. The all-natural fertilizer shall have a minimum guaranteed analysis of 4-6-4 and be USDA Certified BioBased. It should provide a minimum of 4% (N) nitrogen with a minimum water insoluble nitrogen (WIN) fraction of 3.2%, a minimum of 6% (P2O5) available phosphate, a minimum of 4% (K2O) soluble potash, and a maximum carbon to nitrogen ratio (C:N ratio) of 5:1. The all-natural fertilizer shall be free of weed-seed and pathogens accomplished through thermophilic composting, and not mechanical or chemical sterilization, to assure presence of beneficial soil microbiology. The fertilizer shall have a near neutral pH, a low salt index, a low biological oxygen demand, contain organic humic and fulvic acids, and have high aerobic organism counts. The fertilizer shall also be stable, free of bad odors, and be unattractive as a food source for animals. It should also be in a granular form that is easily spread.

The all-natural slow release fertilizer shall be applied according to the manufacturer's application recommendations.

The application rate is 34 pounds per 1,000 square feet.

The all-natural slow release fertilizer shall be from the list below or an approved equal:

> Product Sustane

Manufacturer Sustane Corporate Headquarters Cannon Falls, Minnesota Phone: 1-800-352-9245 http://www.sustane.com/

DRILLS

In addition to the drills specified in Section 730 of the Specifications, other types of drills including no-till drills will be allowed as long as they have baffles, partitions, agitators, or augers which keep the seed distributed throughout the seed box and the seed is planted at a depth of $\frac{1}{4}$ to $\frac{1}{2}$.

PERMANENT SEEDING

Grass Species	Variety	Pure Live Seed (PLS) (Pounds/1000 SqFt)
Kentucky Bluegrass	Avalanche, Appalachian, Wildhorse, Blue Bonnet	1.4
Perennial Ryegrass	Turf Type Varieties	1.4
Creeping Red Fescue	Epic, Boreal	1.4
Chewings Fescue	Ambrose, K2, VNS, Zodiac	1.4
Alkali Grass	Fults, Fults II, Quill, Salty	1.4
	Total:	7

STATE OF	PROJECT	SHEET	TOTAL
SOUTH DAKOTA	P SRTS (38)	7	65

Rev 12/11/15 MDN

The areas to be seeded consist of all newly graded areas within the project limits except for the top of roadways and other surfacing.

Type D Permanent Seed Mixture shall consist of the following:



FIBER MULCHING

Fiber mulch shall be applied in a separate operation following permanent seeding.

Fiber mulch shall be applied at the rate of 3000 pounds per acre.

The Contractor shall allow the fiber mulch to cure a minimum of 18 hours prior to watering or any storm event to ensure proper cohesion between the soil and fiber particles.

All costs for the additional tackifier added to the fiber mulch including labor, equipment, and materials shall be incidental to the contract unit price per pound for "Fiber Mulching".

The fiber mulch provided shall be from the approved product list. The approved product list for fiber mulch may be viewed at the following internet site:

http://sddot.com/business/certification/products/Default.aspx

HIGH FLOW SILT FENCE

The high flow silt fence fabric provided shall be from the approved product list. The approved product list for high flow silt fence may be viewed at the following internet site:

http://sddot.com/business/certification/products/Default.aspx

High flow silt fence shall be placed at the locations noted in the table and at locations that will minimize siltation of adjacent streams, lakes, dams, or drainage areas as determined by the Engineer during construction. Refer to Standard Plate 734.05 for details.

TABLE OF HIGH FLOW SILT FENCE

			Quantity
Station	L/R	Location	(Ft)
1+91 to 2+00	L	Across Interstate Ditch	50
3+56 to 3+65	L	Across Drainage Channel	20
13+33 to 13+61	L	Across Drainage Channel	30
		Total:	100

EROSION CONTROL BLANKET

Erosion control blanket shall be installed at the locations noted in the table and at locations determined by the Engineer during construction.

The erosion control blanket provided shall be from the approved product list. The approved product list for erosion control blanket may be viewed at the following internet site:

http://sddot.com/business/certification/products/Default.aspx

The Contractor shall install erosion control blanket according to the manufacturer's installation instructions.

TABLE OF EROSION CONTROL BLANKET

Refer to Standard Plate 734.11 for details.

Product

Dandy Curb

INLETS

					Quantity
Station to	Station	L/R	Location	Туре	(SY)
13+33	13+61	L	Drainage Channel	3	31
		T	otal Type 3 Erosion Cor	ntrol Blanket:	31

SEDIMENT CONTROL AT TYPE S REINFORCED CONCRETE DROP

The sediment control device provided shall be from the list shown below.

Manufacturer

Dandy Products Inc.

Phone: 1-800-591-2284

www.dandvproducts.com

Dublin, OH

tracked onto the street.

The Contractor shall use a pickup broom having integral self-contained storage to clean the roadway. The pickup broom used shall be a minimum of 6 feet wide and have working gutter brooms.

At a minimum, sweeping will be required:

vehicular traffic.

open to traffic

All costs for cleaning the roadway with a pickup broom shall be incidental to the contract unit price per hour for "Sweeping".

CONCRETE WASHOUT FACILITY

All costs for furnishing, installing, and maintaining the washout facility, as well as removal of concrete and washout facility shall be incidental to the contract unit price per each for "Concrete Washout Facility".

	www.danayproducts.com
Gutterbuddy	ACF Environmental Richmond, VA Phone: 1-800-448-3636 <u>www.acfenvironmental.com</u>
SS-300	Silt-Saver, Inc. Conyers, GA Phone: 1-888-382-7458 <u>www.siltsaver.com</u>
Curb Inlet Guard	ECTEC Environmental Systems LLC Alameda, CA Phone: 1-866-521-0724 <u>www.ertecsystems.com</u>

TABLE OF SEDIMENT CONTROL AT TYPE S **REINFORCED CONCRETE DROP INLETS**

		Clear Opening	Quantity*
Station	L/R	Width (Ft)	(Ft)
41+15.9	R	10	12
		Total:	12

* Quantity shown is the minimum length required and shall be the basis of payment.

STREET SWEEPING

STATE OF	PROJECT	SHEET	TOTAL SHEETS
DAKOTA	P SRTS (38)	8	65

Vehicle tracking of sediment from the construction site shall be minimized. Street sweeping shall be used if erosion and sediment control best management practices are not adequate to prevent sediment from being

1. Prior to opening any sidewalk to pedestrian traffic or roadway to

2. At the end of each day in which sediment has been tracked into streets

The Contractor shall install Concrete Washout Facilities as necessary for capture of all wasted concrete and washout water dumped at the construction site. Locations of Concrete Washout Facilities shall be coordinated with and approved by the Engineer during construction.



GENERAL PLANTING NOTES

All trees shall conform to or exceed minimum quality standards as defined by the American Nursery and Landscaping Association, current edition of American Standard for Nursery Stock, and shall be purchased from a Landscape Nursery. Trees furnished shall be of the same genus, species, cultivar, and size as specified in the plans. Species and variety may be substituted only by the approval of the Engineer. Each tree shall have an identification label.

All trees shall bear the same relationship to the finished grade as the plant's original grade before digging. All trees shall be planted in accordance with all the drawings and specifications included in the plans.

Planting locations for each individual species shall be identified prior to planting. Location shall be approved by the Engineer prior to installation.

All trees shall be fertilized.

Within 2 hours after being planted, trees shall be watered to thoroughly saturate the backfill soil as this provides settlement and filling of voids in the backfill.

As soon as the initial planting is completed, the Engineer shall visually inspect trees for health, vigor, and condition, and shall at that time accept or reject them.

The Contractor shall provide a one year warranty for all trees. After one year from initial planting, the Engineer shall make an inspection and dead, unhealthy, or otherwise not acceptable trees shall be replaced by the Contractor at no additional cost to the State.

All costs for furnishing, handling, storing, fertilizing, and planting the trees including the materials, equipment, labor, preparation of the ground, initial watering, clean up of the planted areas, and the warranty, shall be incidental to the contract unit price per each for the corresponding "Tree, Furnish and Plant" bid item.

The exact locations for tree planting shall be determined by the home owner and the Engineer in the field. Generally, trees shall be planted at their original location or as near as practicable to their original locations as the completed project related work allows.



TABLE OF TREE INSTALLATION

Station	COMMON NAME	BOTANICAL NAME	SIZE
6+59.2 - 33.0' L	American Linden	Tilia americana	2" Caliper
7+32.4 - 33.0' L	Austrian Pine	Pinus nigra	4'
9+63.4 - 38.0' L	Colorado Spruce	Picea pungens	4'
9+83.1 - 38.0' L	Colorado Spruce	Picea pungens	4'
12+26.3 - 33.0' L	Sienna Glen Maple	Acer freemanii 'Sienna'	2" Caliper
12+45.7 - 33.0' L	Colorado Spruce	Picea pungens	4'
34+34.6 - 34.0' R	American Linden	Tilia americana	2" Caliper
35+97.7 - 34.0' R	Sienna Glen Maple	Acer freemanii 'Sienna'	2" Caliper
36+26.7 - 34.0' R	Valley Forge American Elm	Ulmus americana 'Valley Forge'	2" Caliper
37+90.3 - 34.0' R	Colorado Spruce	Picea pungens	4'
38+13.0 - 34.0' R	Colorado Spruce	Picea pungens	4'
38+36.4 - 34.0' R	Colorado Spruce	Picea pungens	4'

MULCH RING

The 12 trees to be installed shall receive a mulch ring with a minimum diameter of 4 feet and a minimum thickness of 4 inches placed around each individual tree.

All costs for furnishing, handling, and placing the mulch rings including the materials, equipment, labor, and incidentals necessary shall be incidental to the contract unit price per each for "Mulch Ring".

PAVEMENT MARKING

The pavement marking material shall be as defined in Section 980 and Section 981 of the Specifications.

REMOVE, SALVAGE, RELOCATE AND RESET PERMANENT SIGNS

The Contractor shall remove, salvage, relocate, and reset signs as indicated in the Sign Remove and Reset Table.

The Contractor shall replace in kind any signs, supports, support bases or related hardware lost or damaged during the time the signs were removed, salvaged, stockpiled and reset. Any replacement materials shall be in kind and at the Contractor's expense.

To complete the project sign work, resetting of signs shall be at their original location or as near as practicable to their original locations as completed project related work allows.

	STATE OF	PROJECT	SHEET	TOTAL SHEETS
	SOUTH DAKOTA	P SRTS (38)	9	65
I				

TABLE OF PIPE QUANTITIES																	
	A	rch	Flare	ed End			-	• -									
	18"		18"														
	CI 2		Arch														
Station	Ft		Each														
13+41.6-34.59' L to 13+41.6-20.46' L	10		1														
13+45.2-34.59' L to 13+45.2-20.47' L	10		1														
13+48.6-34.59' L to 13+48.6-20.47' L	10		1														
														1			
									1			1	1				
			-		-									-			
			1														
			+	+	+									+			
			1		1									-			
То	TAL: 30		3						1				1				
				1	1			1 1	1	1	1	I	1	1	1		1



			Right-of-Way Fence		Post Panels	Wood Privacy F	ence		
		Sido	Remove Fence	Type 5 Fence	2 Post	Remove Fence For Reset	Reset		
Station to S	Station	(L/R)	(Ft)	(Ft)	(Each)	(Ft)	(Ft)		
2+11.2		1			1				
					• •				
2+11.2	3+58.1	L	173	173					
6+61.5	37+10.0	R				59	49		
0.01.0	01 - 10.0						-10		
		0741.0	470	470		50	40		
		OTALS.	175	175	I		49		

STATE OF	PROJECT	SHEET	TOTAL
SOUTH	P SRTS (38)	11	SHEETS
DAKOTA		11	65
	Post Type and Sequer	nce:	
	· · · · · //· · · · · · · · · · · · · ·		
	Right-of-way fence shall	be	
	constructed using alterna	ite	
	wood and steel posts exc	cept	
	as noted.		
	Reset Fence:		
	5 feet of fence will be ren	noved	
	from the East and West	sides.	
	-		











TYPICAL GRADING



STATE OF	PROJECT	SHEET	TOTAL	
SOUTH DAKOTA	P SRTS (38)	13	65	



HORIZONTAL ALIGNMENT DATA

Туре

POB

ΡI

POE

	COURT STREET								
Туре	Station			Northing	Easting				
POB	0+00.00			15510438.451	2262592.660				
		TL= 181.47	S 89°04'33" W						
PC	1+81.47			15510435.524	2262411.209				
PI	2+04.64	R= 56	Delta = 44°56'58" R	15510435.150	2262388.045				
PT	2+25.41			15510451.250	2262371.387				
		TL= 105.95	N 45°58'29" W						
PC	3+31.36			15510524.881	2262295.207				
PI	3+54.52	R= 56	Delta = 44°56'55" R	15510540.981	2262278.550				
PT	3+75.29			15510564.144	2262278.135				
		TL= 949.03	N 1°01'34" W						
PI	13+69.39			15511513.020	2262261.139				
		TL= 352.24	N 1°20'07" W						
PI	17+21.64			15511865.167	2262252.931				
		TL= 305.95	N 1°20'07" W						
PI	20+27.58			15512171.029	2262245.802				
		TL= 68.24	N 30°02'47" E						
POE	20+95.82			15512230.099	2262279.970				
		TL= 305.95	N 1°20'07" W						
POE	A 20+95.82			15512230.099	2262279.970				
		TL= 68.24	N 30°02'47" E						

DUPONT STREET

Station			Northing	Easting
30+00.00			15511826.384	2261713.623
	TL= 1080.76	N 89°05'28" E		
40+80.76			15511843.527	2262794.251
	TL= 104.64	S 60°03'36" E		
41+85.41			15511791.000	2262884.931

DANTA P SRTS (38) 14 65 ONAL ENG/VC 5 5 S801 KIM LARUE 5 5 S801 KIM LARUE 5 5 MILL MILL 5	65
S801 KIM LARUE BC S801 KIM LARUE COLOT-15 S801 KIM LARUE MCLAURY 12-01-15 S801 KIM LARUE MCLAURY MCLAURY	
Solution of the second	
South Lengingers South	
Sall KIM LARUE BALAURY Solution KIM LARUE MCLAURY Solution KIM LARUE MCLAURY Solution KIM LARUE MCLAURY Solution KIM LARUE MCLAURY KIM CALURY KIM CALURY	
S801 KIM LARUE MCLAURY S801 KIM LARUE MCLAURY S00 KIM LARUE MCLAURY S00 KIM LARUE MCLAURY S00 KIM LARUE MCLAURY S00 KIM LARUE MCLAURY KIM CAURY KIM CAURY	
Solution of the second	
Solution of the second	
South Days of the second secon	
Signation of the second	
Solution of the second	
Solver Solver The Solver Solve	
Solution of the second	
Souther Southe	
South and the second se	
Source and the second s	
S801 KIM LaRUE S801 KIM LaRUE NCLAURY S00 Notes	
Sant KIM LaRUE Sant KIM LaRUE NcLAURY Sont Sant Sant Sant Sant Sant Sant Sant Sa	
SS01 KIM LaRUE SS01 KIM LaRUE McLAURY 12-01-15 S01 KIM LaRUE McLAURY	
SSON AL ENGINESS SSON PEG. NO. 5801 KIM LARUE MCLAURY 12-01-15 SOUTH DAYS SOUTH DAYS SOU	
SOUND ENGINESS SOUND ENGINESS SEG. NO. SB01 KIM LARUE MCLAURY 12-01-15 SOUTH DANG SOUTH	
Source of the second se	
SSONAL ENGINES SSONAL ENGINES	
Solution of the second	
SSU SEG. NO. SSU SEG. NO. SSU SSU SSU SSU SSU SSU SSU SSU SSU SSU	
SSO NAL ENG/NSCA SSO NO. SSO SSO SSO SSO SSO SSO SSO SSO SSO SSO SSO	
SSONAL ENGINESCA SSONAL	
SOUND ENGINEER SOUND ENGINEER PEG. NO. 5801 KIM LARUE MCLAURY SOUTH DANGLOW MCLAURY SOUTH DANGLOW MCLAURY SOUTH DANGLOW MCLAURY SOUTH DANGLOW MCLAURY SOUTH DANGLOW MCLAURY SOUTH DANGLOW MCLAURY SOUTH DANGLOW MCLAURY M	
550 VAL ENG/VS FR 560 VAL ENG/VS FR 5801 KIM LARUE McLAURY 50 VTH DAVO 12-01-15 50 VTH DAVO 12-01-15 50 VTH DAVO MCLAURY 50 VTH DAVO 12-01-15 50 VTH DAVO 12-01-15 10-01 10-0	
550 PEG. NO. 550 PEG. NO. 5801 KIM LaRUE McLAURY 50 POINTH DAVID 50 POINTH DAV	
500 NAL ENGINESED 510 PEG. NO. 5801 KIM LARUE McLAURY 500 MH DAVOR 12-01-15 500 MH DAVOR 100 MH DAVOR	
550 VAL ENG/NESS ¢EG. NO. 5801 KIM LARUE McLAURY 500 12-01-15 500 00 00 00 00 00 00 00 00	
SSI SSI SSI SSI SSI SSI SSI SSI	
550 NAL ENGINESCO PEG. NO. 5801 KIM LARUE McLAURY 12-01-15 50 0 0 0 0 0 0 0 0 0 0 0 0 0	
5801 S801 KIM LaRUE McLAURY S S S MCLAURY S S S MCLAURY S S S S MCLAURY S S S MCLAURY S S S MCLAURY S S S S S S S S S S S S S	
SSI PALENG/NGER PEG. NO 5801 KIM LaRUE McLAURY 12-01-15 SO 00 12-01-15 SO 00 12-01-15 SO 00 12-01-15 SO 00 12-01-15 SO 00 12-01-15 SO 00 12-01-15 SO 00 12-01-15 SO 00 12-01-15 SO 00 10 10 10 10 10 10 10 10 10	
5801 KIM LaRUE McLAURY 50 12-01-15 50 12-01-15 50 12-01-15 50 12-01-15 50 12-01-15 50 12-01-15 50 12-01-15 50 12-01-15 50 10 12-01-15 50 10 10 10 10 10 10 10 10 10 1	
SB01 KIM LaRUE McLAURY SOUTH DAVO MMCLAURY SOUTH DAVO MMCLAURY	
SSONAL ENGINEER PEG. NO. 5801 KIM LARUE McLAURY 12-01-15 SOUTH DAKO AND ADD ADD ADD ADD ADD ADD ADD	
550 CSI CSI CSI CSI CSI CSI CSI CSI	
5801 KIM LaRUE McLAURY 12-01-15 SOUTH DAKON MM	
5801 KIM LARUE McLAURY 12-01-15 South DAXO MM AM Courty	
KIM LARUE McLAURY 12-01-15 South DAYON KIM AMAGERY	
McLAURY H 12-01-15 South DAKO N M M M M M M M M M M M M M	
him AM Loery	
him AM Cerry	
him Andaery	
him Maery	
him FM Loury	
\sim /	
\sim	
\sim	

CONTROL DATA

	HORIZONTAL AND VERTICAL CONTROL POINTS									
POINT	POINT STATION & OFFSET DESCRIPTION NORTHING									
CP1	3+53.97 - 27.70' R	PROPERTY CORNER - NE COURT AND LEXINGTON	15510554.1600	2262308.0410	1121.320					
CP2	6+59.22 - 29.81' L	PROPERTY CORNER - 5/8" REBAR	15510802.4230	2262244.0570	1121.810					
CP3	13+69.69 - 30.19' L	PROPERTY CORNER - 5/8" REBAR	15511512.6070	2262230.9540	1123.630					
CP4	16+61.63 - 30.11' L	PROPERTY CORNER - SW DUPONT AND COURT	15511804.4700	2262224.2240	1125.370					
CP5	18+96.53 - 29.89' L	PROPERTY CORNER - SE 501 COURT	15512039.3190	2262218.9700	1127.570					
CP6	20+21.38 - 30.00' L	PROPERTY CORNER - 5/8" REBAR	15512164.1250	2262215.9550	1126.970					
CP7	33+30.34 - 30.00' L	PROPERTY CORNER - 5/8" REBAR	15511861.6200	2262043.4420	1125.710					
CP8	35+70.83 - 30.11' R	PROPERTY CORNER - 5/8" REBAR	15511805.3270	2262284.8610	1125.120					
CP9	37+46.94 - 30.00' R	PROPERTY CORNER - SW DUPONT AND PARK PLACE	15511808.2360	2262460.9410	1124.510					
CP10	40+17.13 - 30.00' R	PROPERTY CORNER - NW HUBER TRACT 8	15511812.5210	2262731.1010	1124.550					
CP11	41+85.41 - 30.00' R	PROPERTY CORNER - SE PEARL AND DUPONT	15511765.3030	2262869.9580	1123.600					

The coordinates shown on this sheet are based on the South Dakota State Plane Corrdinate System. South Zone (NAD 83/2007); Geoid 09; SF=0.99993757

The elevations shown on this sheet are based on NAVD 88.

	STATE OF	PROJECT	SHEET	TOTAL
	DAKOTA	P SRTS (38)	15	65
	ſ			
	1			
N				
	,			
		STATUTO NO	The	
		SONAL STONAL	EP A	
		5801	ēg	
		KIM LaRUE	- S	
		12-01-15	Sugar Star	
		A Sar A Shin Dave	03	
		Line MAR	8	
		Marin VIIIX	y	
			\sim	

EXISTING TOPOGRAPHY SYMBOLOGY AND LEGEND

Anchor
Antenna
Approach
Assumed Corner
Azimuth Marker
Bbg Grill/ Fireplace
Bearing Tree
Bench Mark
Box Culvert
Bridge
Bruch
Diusii Duildingo
Bulk Tapk
Cottle Cuard
Centerline
Centenine
Cistern Olathais Line
Commercial Sign Double Face
Commercial Sign One Post
Commercial Sign Overhead
Commercial Sign Two Post
Concrete Symbol
Creek Edge
Curb/Gutter
Curb
Dam Grade/Dike/Levee
Ditch Block
Drainage Profile
Drop Inlet
Edge Of Asphalt
Edge Of Concrete
Edge Of Gravel
Edge Of Other
Edge Of Shoulder
Elec Trans /Power.lct Box
Fence Barbwire
Fence Chainlink
Fence Electric
Fence Misc
Fence Rock
Fence Snow
Fence Show
Flag Pole
Flower Bed
Gas Valve Or Meter
Gas Pump Island
Grain Bin
Guardrail
Gutter
Guy Pole
Haystack
Hedge
Highway R.O.W. Marker

(
<u> </u>
۵
▲
▲
<u> </u>
+
©
1
þ
þ
<mark>ط</mark> الأنتي
P
44
P
7777
Ø
~~~~
 0
₩ ₩
62233

nformation Sign One Post	þ
nformation Sign Two Post	þ
nterstate Close Gate	
ron Pin	•
rrigation Ditch	
ako Edgo	
ane Euge	
	•
	U
	0
Viannole Gas	0
Manhole Misc	0
Manhole Sanitary Sewer	Ø
Manhole Storm Sewer	Ø
Manhole Telephone	O
Manhole Water	0
/lerry-Go-Round	*
/licrowave Radio Tower	<b>Ý</b>
Aisc. Property Corner	
/lisc. Post	0
Overhang Or Encroachment	
Overhead Utility Line	— ОН —
Parking Meter	Ŷ
Pipe With End Section	
Pipe With Headwall	——————————————————————————————————————
Pipe Without End Section	
Playaround Slide	
	ул л Ушци
Power And Light Pole	
Power And Light Pole	
Power And Telephone Pole	
Power Meter	
Power Pole	
Power Pole And Transformer	- <b>Ç</b> -
Power Tower Structure	岱
Propane Tank	
Property Pipe	$\odot$
Property Pipe With Cap	۲
Property Stone	PS
Public Telephone	
Railroad Crossing Signal	- <b>¢</b> -
Railroad Milepost Marker	
Railroad Profile	
Railroad R.O.W. Marker	
Railroad Signs	þ
Railroad Switch	
Railroad Track	
Railroad Trestle	
Rebar	æ
Rebar With Can	$\mathbf{A}$
Reference Mark	æ
Retaining Wall	
Rinran	
Ninap Divor Edgo	uuuu
NVEL LUYE Dock And Wire Reskets	
NUUR ANU VVITE DASKEIS Dookoiloo	
NUURPIIES Dauta Sign One Dest	<i>00</i> 0000
	P b
Koule Sign Two Post	Б.

Satellite Septic Ta Shrub Tr Sidewalk Sign Fac Sign Pos Slough C Spring Stream ( Street Ma Telephor Telepho Telepho Televisio Televisio Test Wel Traffic Si Trash Ba Tree Belt Tree Co Tree De Tree Stu Triangula Undergr Undergr Undergr Undergr Undergro Undergr Undergro Undergro Warning Warning Water Fo Water Hy Water Me Water To Water Va Water We Weir Roo Windmill Wingwall Witness State and County L Section Quarter Sixteent Property Construc R. O. W. New R. Cut and Control o

	STATE OF	PROJECT	SHEET	TOTAL SHEETS
	SOUTH DAKOTA	P SRTS (38)	16	65
Ì				
-				
Satellite Dish		×		
Septic Tank		φ		
Shrub Tree		\$		
Sidewalk				
Sign Face				
Sign Post		o anticeantice		
Slough Or Marsh				
Spring		2 <u>2</u> )		
Stream Gauge		Ø		
Telephone Fiber Ontics		— T/F —		
Telephone Junction Box		Ð		
Telephone Pole		Ø		
Television Cable Jct Box		<b>₩</b>		
Television Tower		<b>*</b>		
Test Wells/Bore Holes		۵		
Traffic Signal		<b>\$</b>		
Trash Barrel		Φ		
Tree Belt				
Tree Coniferous		×		
Tree Deciduous		B		
Triangulation Station		A		
Underground Electric Lin	е	— P —		
Underground Gas Line	-	— G —		
Underground Sanitary Se	ewer	— s —		
Underground Storm Sew	er	= s =		
Underground Tank		<u>—</u>		
Underground Telephone	Line	— T —		
Underground Television	Cable	— TV —		
Underground water Line		— w —		
Warning Sign One Post		þ		
Water Fountain		Þ		
Water Hydrant		- 03		
Water Meter		۷		
Water Tower		<u>A</u>		
Water Valve		0		
Water Well		$\odot$		
Weir Rock				
Windmill		٥		
Wingwall				
witness Comer				
State and National Line				
County Line				
Section Line				
Quarter Line				
Sixteenth Line				
Property Line				
Construction Line				
R. O. W. Line				
New R. U. W. Line				
Control of Access				
New Control of Access				

RIGHT OF WAY AND EASEMENT OWNERSHIP TABLE					STATE OF SOUTH	PROJECT	SHEET	TOTAL			
					DAKOTA	P SRTS (38)	17	65			
Parcel No.	Station (Begin) Station (End)	Side	Туре	Purpose	Area	Property Owner	Property Description				
A1	1+87.56 to 2+03.44	LT	TEMP	Cut, Fill	250 Sq.Ft.	Elk Point Investements LLP	Lot Seventy Four (74), Country Club Estates Subdivision in the City of Elk P	oint, Union (	County, South Dakota		
A2	4+39.37 to 6+59.22	LT	TEMP	Cut, Fill, Driveway	2200 Sq.Ft.	Larry Hawley and Lori Hawley	Lot Ten (10), Block Four (4), Southview Subdivision in the City of Elk Point, Union County, South Dakota				
A3	6+59.22 to 7+89.34	LT	TEMP	Cut, Fill	1300 Sq.Ft.	Geoffrey Fowler and Ronald Szarenski	Lot Nine (9), Block Four (4), Southview Subdivision in the City of Elk Point, I	Jnion Count	y, South Dakota		
A4	8+54.34 to 9+84.33	LT	TEMP	Cut, Fill	1300 Sq.Ft.	Marcee Irlbeck and Benjamin Irlbeck	Lot One (1), Block Four (4), Southview Subdivision in the City of Elk Point, U	Jnion County	y, South Dakota		
A5	9+84.33 to 11+14.23	LT	TEMP	Cut, Fill	1300 Sq.Ft.	Roger Morrow and Rosemary Morrow	Lot Ten (10), Block Three (3), Southview Subdivision in the City of Elk Point	, Union Cou	nty, South Dakota		
A6	11+79.23 to 13+09.23	LT	TEMP	Cut, Fill	1300 Sq.Ft.	Russell Hanson and Margaret Hanson	Lot One (1), Block Three (3), Southview Subdivision in the City of Elk Point,	Union Coun	ty, South Dakota		
A7	13+69.23 to 14+64.94	LT	TEMP	Cut, Fill, Driveway	1525 Sq.Ft.	Clifford Haines and Esther Haines	Lots One (1) and Two (2), Jones-Larsen Addition to the City of Elk Point, Ur	ion County,	South Dakota		
A8	14+64.94 to 16+61.64	LT	TEMP	Cut, Fill	2580 Sq.Ft.	Gary Steeg and Barbara Steeg	The East Half (E1/2) of Lots One (1), Two (2), Three (3), and Four (4), Block County, South Dakota	Three (3),	Miller's Addition to the City of	of Elk Poin	it, Union
A9	17+21.64 to 18+24.62	LT	TEMP	Cut, Fill, Driveway	1030 Sq.Ft.	Rodney Rosenbaum and Shirley Rosenbaum	The South Fifteen feet (S15'), less the West Seventy-seven feet (W77') of L Seventy-seven feet (W77'), and less Nine feet (9') of Vacated Alley, Block T County, South Dakota	ot Four (4) a wo (2), Mille	nd Lots Five (5) and Six (6) r's Addition to the City of El	, less the \ k Point, Ur	West nion
A9	18+24.62 to 18+96.53	LT	TEMP	Cut, Fill, Driveway	720 Sq.Ft.	Rodney Rosenbaum and Shirley Rosenbaum	The South Half (S1/2) of Lot Three (3) and Lot Four (4), less the South Fifte Two (2), Miller's Addition to the City of Elk Point, Union County, South Dako	en feet (S15 ta	') and less Nine feet (9') of	Vacated A	Alley, Block
A10	18+96.53 to 19+96.04	LT	TEMP	Cut, Fill, Driveway	1000 Sq.Ft.	Elk Point - Jefferson School District 61-7	Lots One (1), Two (2), and the North Half (N1/2) of Lot Three (3) and Nine fee the City of Elk Point, Union County, South Dakota	eet (9') of Va	cated Alley, Block Two (2),	Miller's Ad	dition to
A11	31+51.50 to 33+22.90	RT	TEMP	Cut, Fill, Driveway	1725 Sq.Ft.	Kathleen Brewer	Lots Seven (7) and Eight (8), Block Three (3), Miller's Addition to the City of	Elk Point, U	nion County, South Dakota		
A12	33+38.90 to 34+24.60	RT	TEMP	Cut, Fill, Driveway	900 Sq.Ft.	Matthew Flannery and Tera Flannery	The West Half (W1/2) of Lots One (1), Two (2), Three (3), and Four (4), Bloc County, South Dakota	ck Three (3)	, Miller's Addition to the City	/ of Elk Poi	int, Union
A13	35+70.30 to 36+60.96	RT	TEMP	Cut, Fill	900 Sq.Ft.	Barbara Croy	The West Ninty feet (W90') of the North Ten feet (N10') of Lot Six (6) and th Block Four (4), Miller's Addition to the City of Elk Point, Union County, South	e West Nint Dakota	y feet (W90') of Lots Seven	(7) and Ei	ght (8),
A14	36+60.96 to 37+46.94	RT	TEMP	Cut, Fill	900 Sq.Ft.	Ryan Tatro and Cheryl Tatro	Huber Tract Four (4) of the West Eighty-six feet (W86') of the East Ninty fee Block Four (4), Miller's Addition to the City of Elk Point, Union County, South	t (E90') of L Dakota	ots Five (5), Six (6), Seven	(7), and Ei	ight (8),
A15	37+70.94 to 38+54.94	RT	TEMP	Cut, Fill	900 Sq.Ft.	Kimberly Branson	Huber Tract One (1) of the East Eighty-four feet (E84') of the West Eighty-ei (4), Block Four (4), Miller's Addition to the City of Elk Point, Union County, S	ght feet (W8 outh Dakota	38') of Lots One (1), Two (2) 1	), Three (3)	), and Four
A16	38+54.94 to 39+16.96	RT	TEMP	Cut, Fill, Driveway	625 Sq.Ft.	Bonnie Lanning and Lonnie Lanning	Huber Tract Five (5), being a part of Lots One (1), Two (2), Three (3), and F Point, Union County, South Dakota	our (4), Bloc	k Four (4), Miller's Addition	to the City	/ of Elk
A17	39+16.96 to 40+17.05	RT	TEMP	Cut, Fill, Driveway	1000 Sq.Ft.	Huber Rental, LLC	Huber Tract Six (6), being a part of of Lots One (1), Two (2), Three (3), and Point, Union County, South Dakota	Four (4), Bl	ock Four (4), Miller's Additic	on to the C	ity of Elk
A18	40+17.05 to 41+25.48	RT	TEMP	Cut, Fill	1000 Sq.Ft.	Veloris Huber	Huber Tract Eight (8) of Huber Tract Seven (7), being a part of Lots One (1) Addition to the City of Elk Point, Union County, South Dakota	, Two (2), Tł	nree (3), and Four (4), Block	k Four (4),	Miller's
A19	30+65.54 to 30+85.54	RT	TEMP	Cut, Fill, Driveway	625 Sq.Ft.	Elk Point Independent School District	Lot A of the Southeast Quarter (SE1/4) of the Southeast Quarter (SE1/4) of	Outlets			
A19	30+65.54 to 30+85.54	RT	PERM	Cut, Fill, Driveway	180 Sq.Ft.	Elk Point Independent School District	Lot A of the Southeast Quarter (SE1/4) of the Southeast Quarter (SE1/4) of	Outlets			
									WAL ENGINE	Dr.	
									REG. NO	ES	
									KIM LaRUE	LAND	×
									12-01-15	Supp	
									Con the second	Ĩ	
									him FM2	ery	
										4	
						I					

## SIGN REMOVE AND RESET TABLE

SIGN DATA							
STATION	DESCRIPTION	SIGN SIZE Width X Height (FT)	REMOVE AND RESET				
			632E3520				
1+94.4	540	1.50 X 1.00					
IT94.4 L	BIKE ROUTE	1.00 X 0.25	· {F · }				
11+74 1	COURT ST.	1.00 X 0.50	1 /P}				
·····	MAPLE CT.	1.00 X 0.50					
14+60.3 L	EMERGENCY SNOW ROUTE NO PARKING IF OVER 2 INCHES	1.50 X 2.00	{U}				
35+64 8 P	STOP	2.50 X 2.50					
00+0 <del>4</del> .01	ALL WAY	1.50 X 0.50	1 1 1 1				
37+74 4 R	DUPONT ST.	1.00 X 0.50	1 {P}				
01-14.410	PARK PLACE	1.50 X 0.50					

Number and type [{U}-Channel, {W}ood, {L}uminaire, {P}ipe, {PF} – Pipe on Footing, {2PF} – Two Pipe on Footing, {PT} – Perforated Tube, {S}ignal Pole, {WU} – Wood Utility, and {2I} Two I-BeamI of support(s)

STATE OF	PROJECT	SHEET	TOTAL SHEETS
DAKOTA	P SRTS (38)	18	65
	STATISTICS AND		
A	ONAL ENGINEE		
AS	REG. NO PZ		
15:	5801		
AK :	KIM LARUE		
a i	McLAURY 5		
12:	5-28-15 29		
VA Fo	Samon The Star		
N.	Brow Jor E		
2/0	X		
1 in	AASA		
	Vinxeery		
	$\nabla$		
	-		







		STATE OF		PROJECT		SHEET	TOTAL
		SOUTH DAKOTA		P SRTS (3	8)	21	62
	· · · · · · ·						
		.					
							1175
							1170
							1170
							1165
		-					
							1160
		.					
							1155
		•   • • • • • • • • • •					
							1150
		.					
							1145
							1140
							1135
					5	TOV 1	
		•   • • • • • • • • • •			2	4' Drive	
	PVI 4+79 Elev 112	9. <u>86 PV</u> 2.26 Ele	5+12,40 v 1122 10			PVI 5+81	<u>1130</u> .52
			v 1122.10			Elev 112	1.84
4 4 1							1125
21.07							1120
099%	<u>0.48</u>	<u>14% q</u> -				<u>0.5812%</u>	
		+					1120
			EXISTI	NG SURFA	CE /		
				NG SURF	ACE		1115
		1					
		.					
							1110
							1105
		1					1100
		.					
							1100
		1					4005
0			<u>&gt;</u>	5	Q	4	1095
22.26	× ۲	21.8	21.8	21.9	21.8	21.9	
11	112	<b>H</b>	11:	11.	11	1	1090
	5	i+00				6+	00





		STATE OF		PROJECT		SHEET	TOTAL
		SOUTH DAKOTA		P SRTS (3	8)	23	62
	· · · · ·						
							1175
							1170
							1170
							1165
							1160
							1100
							1155
							1150
							1100
							1145
							1140
							1140
			11+	471			1135
			36'	Int Street	PVI 11	+67.80	
PV Ele	'l 11- av 11	-12.77 23 54	(Ma	ple Court	) Elev 1 P\	123.12 /I 11+75 8	0
			PVI 11+17. Flev 1123 !	77 54	Ele	ev 1123.6	2
			PVI 11	+25.77		Elev 1123	0.80 3.65
		0.0000	Elev 1	123.08	0.70%	1%	1125
			2207		-00-043%	¢	
TO FOLLOW — IG SURFACE			-~ /0		0.4		1120
							1115
					-		
							<u>1110</u>
							1105
					-		
							1100
	0		~	~		++	1095
	23.4(	23.4			23.6		
11:	112	11:	112	112	112	11.	1090
5	SW 1	1+00				SW 1	2+00





		STATE OF		PROJECT		SHEET	TOTAL SHEETS
		SOUTH DAKOTA		P SRTS (3	8)	25	62
	<b>-</b>						
							1175
		1					4470
							1170
							1165
							1160
							1155
							1150
							1145
							1140
							1140
	16+90-L 31' Int S	- Street					
	(Dupont	St.)					4405
							1135
.48 PV 33 Ele	l 16+72.6 v 1125.41	3 <u>PVI 1</u> Elev 1	7+07.00				
PV	16+74.2	3 P	VI 17+15.0	0			1130
Ele	v 1125.55		ev 1126.28		507 — — — — —		
1.6056%		-		2.081	<u>u 20</u>		
$\frac{6}{8.333}$	1	8.333%	р 				1125
							1120
		1					
							1115
							1110
							1105
CP 4							1100
16+61.6	3 - 30.1 ⁻	1 L					1100
Property Flev 111	Corner	SW Cor	ner of Du	pont and	Court		
							1095
.56	.59	3.38	.80	.21	.63	3.00	
1125	1125	1126	1126	1127	1127	1128	4000
	SW	17+00				SW 1	1090 8+00





														STATE OF		PROJECT		SHEET	TOTAL
														SOUTH DAKOTA		P SRTS (3	3)	27	62
	NAL ENGING									 									
	EG. NO														_				
																			í.
																			1
	人民 12-01-15 8日									 									
1180	KES SUTHDAYOF STA							1180										i	i
1175	2							1175											
	AM FM Leery																		í.
4470								4470		 									
1170								1170											
1165								1165											
1160								1160											l
										 									 I
1155								1155										i	i
1150								1150											
																			í.
								4445		 									
1145								1145										i – – – – –	ĺ
1140								1140											
	18+21-L 18+55-L									 									
1135	<b>11' Drive  9' Drive</b>   PVI 18+14.88 PVI 18+50.52 PVI	/  18+99	.50 PVI 19+60.26 Elev 1127.59	6				1135											í.
	Elev 1127.00 Elev 1127.29 Ele	ev 1127.	42 PVI 19+63.	.89 62															1
	PVI 18+26.00 Elev 1127.50	Ele	ev 1127.31	PVI 19-	85,91					 									 
1130	*7.2pp			LIEV II	21.42			1130											[
	$0^{-2}$ $(1.4682\%)$ $-0^{-0.1864\%}$ $-0.76$	639%	0.5824%0.8264%	9		. <u></u>				 									
1125	-0.6295% 2.34537%		-0.0000%					1125										<u> </u>	
1120								1120											
1120								1120											
1115								1115										ł	[
1110								1110											
																		i T	
4405								4405		 									 
1105		+96.53	- 29.89'L					1105										<del> </del>	
	Pro	operty ev 112	Corner - SE Corner of 501 Co 7.5700	ourt						 									
1100								1100											
8.00	6.97 7.14 7.50 7.46	7.35	7.47																
1095		112	112 12 12					1005											
SW 2	8+00 SW 19+0	00		SW 2	20+00		SW 2	21+00	l		1	1		I					





		STATE OF		PROJECT		SHEET	TOTAL SHEETS
		SOUTH DAKOTA		P SRTS (3	8)	29	62
		.					
		_					1175
							1170
							1170
		.					
		_					1165
							1160
							1100
							1155
							1150
							1150
		-					
							1145
							1140
			05	. 40 D			1140
			35-36'	F43-R Int Stree	t PVI 35+6	3 22	
			(Co	ourt St.)	Elev 112	4.74	1135
PVI Elev	34+98.93 / 1126.05	3 PV 5 Ele	v 1125.33		Elev	1125.41	
			PVI 35+17. Flev 1125 3	30 33	EI BI	VI 35+76.2	22
			PVI 35+	22.96		PVI 35+	32.38
0774%		- 5 0	Elev 112	4.86		Elev 112	5.68
.011470			333%		2.000%	<u>3.8822</u> %	1125
		0.0000	%~	8	.3333%2.0		
							1120
							1120
• • • • • • • • • •		.					
							1115
							1110
							1110
							1105
				CF	8		1100
				35	+70.83 -	30.11'R	
		.		Pr El	operty Co ev 1125.1	rner - 5/ 200	o Rebar
							1095
	و م	5.11	4.67	4.60	5.62		
112	112	112	112	112	112	112	1090
	3	5+00				36-	+00



																					STATE OF		PROJECT		SHEET	TOTAL SHEETS
																					SOUTH DAKOTA		P SRTS (3	8)	31	62
		ANAL ENGINE														.										
		CSION DEG. NO																								
	£	5901	EV)													.										
	+-6	KIM LaRUE	ΣI_																							
		A McLAURY	6																							
1175		出。12-01-15	<u>S</u> A																							1175
		TH DAKON S	S A																							
			<u> </u>																							
1170																										1170
	<b></b>	VIII X///Xae	<u>ery</u>																							
1165			$\bigvee$																							1165
1160																										1160
					-													+							• • • • • • • • • • •	
1155																										1155
					-		.     .			.														-		
1150																										1150
												]										]				
1145																										1145
1140																										1140
						37+	-59-R Int Street						39+16- 42' Driv	R.		.										
1135						(Pa	rk Place)	7.70.00					42 011													1135
	PVI	36+10.00			PV Ele	av 1124.72	FVI 3 Elev	1123.77				PVI.38+7	9.25	PVI 39+3	37.49	PVI 39+7	9.83				PVI 4	1+07.68				
1130	Elev	1124.95				PVI 37+37 Elev 1124.	.74 F 62 E	PVI 37+80.63 Elev 1124.30			1	Elev 1124	87 VI 38+95 61	Elev 112	4.29	Elev 1124	1.53				Elev	1123.45 1 41+12 68				1130
1100						PVI 374 Elev 11	45.74	PVI 37+85.63				Ē	ev 1124.49								Ele	v 1123.35	0.00			
	0.5000%															•						Elev 1122	2.68			
1125					<u></u>	<u>0%</u>	1.74	03% Q				2.2642%		00.	5460%	<b>x</b>					-2.0000%					1125
					~7.5	903%	6.5601		ALK TO FOL				-0.4776%								8.333	0				
1120		SIC SIC	DEWALK TO EXISTING	O FOLLOW SURFACE	//			LXIOT	SIDEWAL	K TO FOLL	. <u></u> _/						51110 50	RFACE	EXISTING S	SURFACE		ø%				1120
									EXIST	ING SURF.	ACE															
1115	[		1	1								]	]					[			]	]				1115
1110																										
																.										
1110							$\left  \right $																			1110
							-																			
1105																										1105
1100	[												]					P 10			1	CP 414	11 85 41 - 3	0.00'R		1100
1100						37+4	6.94 - 30.pc	)'R			<u> </u>						4	0+17.13	- 30.00'R		-	Pro	perty Co	ner - SE	Corner of	Pearl
				-	-	Elev	arty Corner 1124.5100	- Svy Corner	or pupont a	and Park	riace							roperty ( lev 1124	orner - NW Co 5500	orner Huber	I ract 8	Ele	v 1123.60	<u>and</u> 000	Uupont	
1095	-			~	10				10 -						~					0						1095
25.00	25.05	25.3( 25.1( 75.13	25.13	24.83	24.45	23.85			24.51	24.65	24.85	24.47			24.53	24.46	24.35	24.23		23.7(	22.74					
1090	11:		11	112	112	112	111	Ψ.	11:11:11:11:11:11:11:11:11:11:11:11:11:	111	112	112	11:	11	1 11	11:1	112	11	11	11 11	112					1090
36	i+00		37	7+00				38+00				30	+00			40	+00			41	+00				42+	<u>იი –</u>

# CURB & GUTTER LAYOUT



	STATE OF	PROJECT	SHEET	
	SOUTH DAKOTA	P SRTS (38)	32	65
NOTES: All Sidewalk Drive is Typ	state of south Dakota	PROJECT P SRTS (38)	SHEET 32	TOTAL SHEETS 65
	6700	6+81.50 -28.00' - 5+81.43 -33.00' 6+05.37 -33.00' 6+05.60 -28.00'		
		SSONAL ENGIN AEG. NO 5801 KIM LARU MCLAUR 12-01-15 SOUTH DAV MCLAUR	HER THEY STORE	AND SIGN 2



# **CURB & GUTTER LAYOUT**

#### NOTES:

All curb grinding shall be on existing curb. All curb grinding shall produce a smooth, uniform surface. At completion of grinding, the ramp shall meet all applicable elevations, grade, and transition requirements as detailed for new construction in; Special Detail - Grinding Miscellaneous Concrete and Standard Plate 651.02, as well as all ADA Requirements





# **CURB & GUTTER LAYOUT**



STATE OF	PROJECT	SHEET	TOTAL SHEETS
DAKOTA	P SRTS (38)	35	65



NOTES: All Sidewalk is 5.0' Drive is Type A









STATE OF	PROJECT	SHEET	TOTAL SHEETS
DAKOTA	P SRTS (38)	38	65

- Turning Space with 2% maximum slope
- Curb Ramp with 8.3% maximum slope and 2% maximum cross slope



5	STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
		P SRTS (38)	39	65

## N1°01'34"W

Legend:

- Turning Space with 2% maximum slope *
- Curb Ramp with 8.3% maximum slope and 2% maximum cross slope



Curb Ramp with 5.0% maximum slope and 2% maximum cross slope



# **CURB RAMP DETAILS**



	STATE OF	F	ROJECT		SHEET	TOTAL
	SOUTH DAKOTA	PS	RTS (38)	ľ	40	65
				-2		
eet	18+00	)				

Legend:

- Turning Space with 2% maximum slope *
- Curb Ramp with 8.3% maximum slope and 2% maximum cross slope **



Curb Ramp with 5.0% maximum slope
and 2% maximum cross slope



# **CURB RAMP DETAILS**



STATE OF	F	PROJECT	SHEET	TOTAL SHEETS
SOUTH DAKOTA	PS	SRTS (38)	41	65
		$(\mathbf{N})$	)	
		$\nabla$		
		A		
		-		
		-		
		-		

Legend:

- * Turning Space with 2% maximum slope
- Curb Ramp with 8.3% maximum slope and 2% maximum cross slope **



* Curb Ramp with 5.0% maximum slope and 2% maximum cross slope



STATE OF	PROJECT	SHEET	SHEETS
SOUTH DAKOTA	P SRTS (38)	42	65
	1		
	$(\mathbb{N})$	)	
	$\bigvee$		
L	egend:		

- * Turning Space with 2% maximum slope
- ****** Curb Ramp with 8.3% maximum slope and 2% maximum cross slope



Dotootoblo Warning





	STATE OF	PROJECT	SHEET	TOTAL
	SOUTH DAKOTA	P SRTS (38)	43	65
	LI			
		$\mathbb{N}$	)	
		Ĭ		
Χ.				
e v				
Ś				
	/			
<u>.</u>	/			
	>			
	$\checkmark$			
192				
/				

Legend:

- Turning Space with 2% maximum slope *
- Curb Ramp with 8.3% maximum slope and 2% maximum cross slope **



Curb Ramp with 5.0% maximum slope
and 2% maximum cross slope







![](_page_45_Figure_0.jpeg)

![](_page_46_Figure_0.jpeg)

![](_page_46_Picture_1.jpeg)

![](_page_47_Figure_0.jpeg)

SOUTHVIEW **SUBDIVISION** 

![](_page_48_Figure_4.jpeg)

![](_page_49_Figure_0.jpeg)

![](_page_50_Figure_0.jpeg)

![](_page_50_Picture_2.jpeg)

![](_page_51_Figure_0.jpeg)

![](_page_52_Figure_0.jpeg)

## SPECIAL DETAILS GRADE BREAK FOR TYPE A APPROACH PAVEMENT **GRINDING MISCELLANEOUS CONCRETE** DRIVE PLAN VIEW Grade Break -Theoretical Top of Mainline Curb Elevation 5'-0" (Min_) 2% (Max.) 10% (Max.) Slope as Indicated in Curb & Gutter Sheets -1/4" R. 🖌 ⊲ ` ⊲ PCC Approach – Pavement Note: The grinding shall produce a smooth, uniform surface. ½"Preformed→ Expansion Joint Filler ∠PCC Approach 0 At completion of grinding, the ramp shall meet all applicable elevation, grade, and transition requirements as detailed for new construction in Standard Plate 651.02 as well as all ADA requirements. - 4" Granular • • • • • • • Pavement Material ∠ Type P Concrete Gutter **PROFILE VIEW** Location and length of grinding are shown on the Curb and Gutter Sheets. ENG

![](_page_53_Picture_1.jpeg)

STATE OF	PROJECT	SHEET	TOTAL SHEETS
DAKOTA	TA P SRTS (38)		65

![](_page_53_Figure_3.jpeg)

![](_page_54_Figure_0.jpeg)

	STATE OF	PROJECT	SHEET	TOTAL SHEETS
SOUTH DAKOTA	P SRTS (38)	55	65	

![](_page_55_Figure_0.jpeg)

![](_page_55_Figure_1.jpeg)

	STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL	
		P SRTS (38)	56	65	

![](_page_56_Figure_0.jpeg)

![](_page_56_Figure_1.jpeg)

* Equivalent Diameter of Circular R.C.P.

#### GENERAL NOTES:

Construction of R.C.P. Arch shall conform to th Specifications. Not more than 2 four-foot sec of any culvert. Four-foot lengths shall be use of culvert.

	S	
	D	
	D	REIN
Dublished Date: Ath Atr 2015	0	
FUDIISIICU DALC. 4111 U.I. 2013	Τ	

			ST	ATE OF		F	PROJECT		SHEET	TOTAL
			S D	SOUTH AKOTA		ΡS	SRTS (3	8)	57	SHEETS 65
			L		1				L	
-										
						Ŋ				
						<u> </u>				
י = פ				`	7					
Ŧ		Ī			Y			N .		
	_					ļ				
Γ	se					ļ	Pale	<u>a</u> ////		
	Ri					i	R2			
	N	,		M						
╞							••••			
	/ ⊢					0	0.00			
1	·	•		Ĩ-		Span		>		
		/			F	ND V	IEW			
					-					
	$\leq c$	Gravel	Beddi	ng Ma	terial	shall	be su	pplied		
	1	for 10	2" to hickn	69" s ess o	pans. f 6"(N	(† sh (in.) x	all be 85% o	placed f the		
	S	Span x	Leng	;th of	culv	ert a	nd sh	all		
or	e c	confor	m to	the o	grada ina e	tion r	equire	ements		
۱	1/2" b		eenec	l or n	nay be	e plan	prov	ided		
		,		ء		ы	<b>D</b> 2			
	(in_)	, (in_)	e (in <b>.</b> )	(in.)	g (in.)	(in.)	кz (in.)	кэ (in <b>.</b> )		
+	3/.	2	11/2	3/_		271/-	123/	51/4		
+	74 13/8	2	1 ³ /8	78 1/2	15/8	401/16	143/4	4 ⁵ /8		
1	1%	3 ¹ /2	1%	5/8	1 13/16	51	18¾	6 ¹ /8		
+	13/4	4	13/4	3/4 3/	2	62	$\frac{22!}{2}$	$\frac{6^{1}/2}{7^{3}/2}$		
╉	2	4	2	74 3∕⊿	∠ 2 ¹ /⊿	84	30	81/8		
1	2 ¹ /4	5	21/4	3/4	21/2	921/2	333/8	10		
Ţ	1 ¹⁵ / ₁₆	5	$2\frac{3}{4}$	3⁄4	$2\frac{1}{2}$	105	371/2			
+	27/6	6	5'/4 31/2		21/2	126	45 52	13%		
$\dagger$	$\frac{2}{3^{1}/2}$	7	4	·	4	218	62	20		
1	4	7	4 ¹ /2	Ι	4 ¹ /2	269	70	22		
+	4 ¹ /2	7	5		5	3013/8	78	24		
	4	1	472	I	472	329	85%	2678		
br		utromo		f Soc	+ico	990 ~	f the			
:+	ions s	shall b	e per	mitte	d nea	r the	ends			
ed	l only	to s	ecure	the	requi	red le	ngth			

June 26, 2015

ORCED CONCRETE PIPE ARCH	plate number 450.02
	Sheet I of I

![](_page_57_Figure_0.jpeg)

![](_page_57_Figure_1.jpeg)

	SOUTH DAKOTA	I	P SRTS (38)	58	65
14-0" OF 16		71/			
		- 3 ¹ /2" D Wood (Тур.)	Post		
/	<b>WINNIN</b>				
20575	ij				
14'-0" or 16'	-6"				
— 3½" Dia. × 6 Wood Post (Typ.)	5'-6"	5'-6" la Weight ancho pound	ong Steel Post t including r plate is 7.99 s ±5% (Typ.)		
	li li ka li				
STEEL POS	STS	<u> </u>	√₂ga. Barbed		
- - - -12½ga. Barbec Wire with 2 P1 27Rd.Barbs	8-8-8-8-8-		re with 2 Pt. J.Borbs		
5	TYP 5 BARBE	E 3 D WIRES			
121/2ga. Barbed Wire with 2 Pt Rd.Barbs 726-6-121/2 Woven Wire 121/2ga. Barbe Wire with 4 P Rd.Barbs RES	d t. TYP 32* WOVE WITH 3 BAF	E 6 F BED WIRES	V/2ga. Barbed re with 2 Pt. J.Barbs 832-6-12V/2 Woven Wire 2V/2ga. Barbed Wire with 4 Pt. Rd.Barbs		
WIRE GE	NERAL NOTES	•			
LE OR plo GN NO. let (bo	ince types o ans that ar tter S shall arbless) wire	e followe have sm s.	a on the ad by the ooth		
₩h	en type 5S	or 6S is	designated		
Th -6-121/2 sm	e bottom w loo <b>t</b> h, or let	ft off.	be barbea,		
-6-12 ¹ /2 AII	degrees of	f curvatu	ure stated for		
-6-12 ¹ /2 fe	nce are at	centerli	ne ot roadway. September 14. 2009		
RIGHT-OF-WA	Y FENCE		plate number 620.01		

Sheet I of I

PROJECT

STATE OF

TOTAL

SHEET

![](_page_58_Figure_0.jpeg)

![](_page_58_Figure_1.jpeg)

	STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL
		P SRTS (38)	59	65

![](_page_59_Figure_0.jpeg)

![](_page_59_Figure_1.jpeg)

![](_page_60_Figure_0.jpeg)

![](_page_60_Figure_1.jpeg)

SOUTH DAKOTA P SRTS (38) 61 65		STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL
			P SRTS (38)	61	65

![](_page_61_Figure_0.jpeg)

	STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL
		P SRTS (38)	62	65

ble warnings are shown in the d	rawings.
ate may be used with a PCC fille ced at the location stated in th	t section or ne plans.
curb ramp flares when a 2' cur	b transition
ade on the curb ramp,free of s	ags and
obtained by coarse brooming tro	insverse to
pined through the area of the r	amp opening.
crete adjacent to the detectab	le warnings
face of the detectable warnings	are clean
essary to fit the plan specified g the detectable warnings shall item.	limits be incidental
ramps. The curb ramp shallbe m are foot for the corresponding he detectable warnings shallbe dewalk.	easured and concrete included
depicted in DETAIL E, the cost of ne rebar shall be incidental to th onding concrete sidewalk bid ite	the materials, ne contract m.
be measured and paid for at th curb and gutter bid item when c p opening shall be measured and for the corresponding PCC fille	e contract urb and paid for t section
ransition area at the base of the per foot for the corresponding and shall be incidental to the onding PCC fillet section bid iter	ne curb ramp ng curb and contract n when a
sured to the nearest square fo ectable warnings including labor, t the contract unit price per s	ot. All costs equipment, quare foot
sured to the nearest square fo ectable warnings including labor, ealant or grout, and necessary square foot for "Type 2 Detect	ot. All costs equipment, grinding shall able Warnings".
	September 6, 2015
TYPE 2 CURB RAMP	PLATE NUMBER 651.02
NRECTIONAL CURB RAMP)	Sheet 3 of 3

![](_page_62_Figure_0.jpeg)

![](_page_62_Figure_1.jpeg)

		CULETTO
SOUTH DAKOTA P SRTS (38)	63	65

![](_page_63_Figure_0.jpeg)

![](_page_63_Figure_1.jpeg)

![](_page_64_Figure_0.jpeg)

![](_page_64_Figure_1.jpeg)

SOUTH DAKOTA P SRTS (38) 65 65		STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL
			P SRTS (38)	65	65