



PROJECT REG - Yankton County, SD - FY17

COMM. NO. 60550589 DATE 29-Nov-2017 CALC BY AECOM CHK BY AECOM

TYPE Culvert Survey Reports PREL. FINAL SHEET

CONTENTS Survey Data Capture - Yankton County, SD - Field Survey for Hydraulic Structures -

Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_MC_04
Stream Name: Marne Creek
Stream Station: 0.00
Hydraulic Length: 46.00

Optional Data

Road Name: 7th St
Comments: Concrete
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,177.73
Top of Road Elevation: 1,175.83
Backsight: 11.50

Structure Conditions

Unknown
TOR 13.40

Culvert Data

Upstream Invert Elevation: 1,171.63
Channel Bank Elevation: 1,181.93

Channel Top Width: 40.00
Channel Bottom Width: 15.00



Looking At: UPSTREAM FACE

Barrels:	Rod Height	Invert Elevation	Shape	Rise	Span
	18.00	1,171.23	Circular	3.00	3.00
	17.50	1,171.73	Circular	3.00	3.00



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_MC_05
Stream Name: Marne Creek
Stream Station: 0.00
Hydraulic Length: 38.00

Optional Data

Road Name: 7th St
Comments: Concrete
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,191.85
Top of Road Elevation: 1,180.95
Backsight: 4.40

Structure Conditions

Unknown
TOR 15.30

Culvert Data

Upstream Invert Elevation: 1,177.05
Channel Bank Elevation: 1,187.05

Channel Top Width: 75.00
Channel Bottom Width: 14.00



Looking At: UPSTREAM FACE

Barrels:	<u>Rod Height</u>	<u>Invert Elevation</u>	<u>Shape</u>	<u>Rise</u>	<u>Span</u>
	19.30	1,176.95	Circular	3.00	3.00
	19.50	1,176.75	Circular	3.00	3.00



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(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_MC_07
Stream Name: Marne Creek
Stream Station: 0.00
Hydraulic Length: 30.00

Optional Data

Road Name: Pine St
Comments: Concrete
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,196.66
Top of Road Elevation: 1,198.36
Backsight: 4.90

Structure Conditions

Unknown
TOR 3.20

Culvert Data

Upstream Invert Elevation: 1,181.26
Channel Bank Elevation: 1,190.46

Channel Top Width: 36.00
Channel Bottom Width: 23.00



Looking At: UPSTREAM FACE

Barrels:	<u>Rod Height</u>	<u>Invert Elevation</u>	<u>Shape</u>	<u>Rise</u>	<u>Span</u>
	20.30	1,181.26	Elliptical	15.30	40.00



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_MC_08
Stream Name: Marne Creek
Stream Station: 0.00
Hydraulic Length: 32.00

Optional Data

Road Name: 7th St
Comments: Concrete
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,185.82
Top of Road Elevation: 1,185.12
Backsight: 10.30

Structure Conditions

Unknown
TOR 11.00

Culvert Data

Upstream Invert Elevation: 1,181.32
Channel Bank Elevation: 1,189.62

Channel Top Width: 30.00
Channel Bottom Width: 14.00



Looking At: UPSTREAM FACE

Barrels:	Rod Height	Invert Elevation	Shape	Rise	Span
	15.00	1,181.12	Circular	3.00	3.00
	14.90	1,181.22	Circular	3.00	3.00



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_MC_13.2
Stream Name: Marne Creek
Stream Station: 0.00
Hydraulic Length: 66.00

Optional Data

Road Name: Footpath
Comments: Concrete
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,200.93
Top of Road Elevation: 1,192.53
Backsight: 5.80

Structure Conditions

Unknown
TOR 14.20

Culvert Data

Upstream Invert Elevation: 1,188.73
Channel Bank Elevation: 1,193.73

Channel Top Width: 20.00
Channel Bottom Width: 10.00



Looking At: UPSTREAM FACE

Barrels:	Rod Height	Invert Elevation	Shape	Rise	Span
	18.00	1,188.73	Circular	3.00	3.00
	18.00	1,188.73	Circular	3.00	3.00



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_MC_16
Stream Name: Marne Creek
Stream Station: 0.00
Hydraulic Length: 32.00

Optional Data

Road Name: Locust St
Comments: Concrete
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,201.66
Top of Road Elevation: 1,201.46
Backsight: 5.00

Structure Conditions

Unknown
TOR 5.20

Culvert Data

Upstream Invert Elevation: 1,196.96
Channel Bank Elevation: 1,201.26

Channel Top Width: 25.00
Channel Bottom Width: 10.00



Looking At: UPSTREAM FACE

Barrels:	Rod Height	Invert Elevation	Shape	Rise	Span
	9.50	1,197.16	Circular	3.00	3.00
	9.60	1,197.06	Circular	3.00	3.00



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_MC_21
Stream Name: Marne Creek
Stream Station: 0.00
Hydraulic Length: 50.00

Optional Data

Road Name: Private Drive
Comments: Concrete
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,208.60
Top of Road Elevation: 1,207.20
Backsight: 6.90

Structure Conditions

Unknown

TOR 8.30

Culvert Data

Upstream Invert Elevation: 1,203.80
Channel Bank Elevation: 1,208.80

Channel Top Width: 33.00
Channel Bottom Width: 10.00



Looking At: UPSTREAM FACE

Barrels:	Rod Height	Invert Elevation	Shape	Rise	Span
	11.80	1,203.70	Elliptical	2.00	3.00
	11.80	1,203.70	Elliptical	2.00	3.00



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_MC_23
Stream Name: Marne Creek
Stream Station: 0.00
Hydraulic Length: 80.00

Optional Data

Road Name: W 21st St
Comments: CMP
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,217.41
Top of Road Elevation: 1,220.61
Backsight: 8.20

Structure Conditions

Unknown
TOR 5.00

Culvert Data

Upstream Invert Elevation: 1,208.71
Channel Bank Elevation: 1,216.71

Channel Top Width: 30.00
Channel Bottom Width: 5.00



Looking At: UPSTREAM FACE

Barrels:	Rod Height	Invert Elevation	Shape	Rise	Span
	16.90	1,208.71	Elliptical	11.00	9.50
	16.80	1,208.81	Elliptical	11.00	9.50



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_MC_24
Stream Name: Marne Creek
Stream Station: 0.00
Hydraulic Length: 114.00

Optional Data

Road Name: State Hwy 50
Comments: CMP
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,220.68
Top of Road Elevation: 1,221.18
Backsight: 5.60

Structure Conditions

Unknown
TOR 5.10

Culvert Data

Upstream Invert Elevation: 1,210.48
Channel Bank Elevation: 1,214.58

Channel Top Width: 15.00
Channel Bottom Width: 5.00



Looking At: UPSTREAM FACE

Barrels:	Rod Height	Invert Elevation	Shape	Rise	Span
	15.00	1,211.28	Elliptical	8.50	12.50
	15.40	1,210.88	Elliptical	8.50	12.50



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_MC_25
Stream Name: Marne Creek
Stream Station: 0.00
Hydraulic Length: 100.00

Optional Data

Road Name: State Hwy 50
Comments: CMP
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,222.20
Top of Road Elevation: 1,222.70
Backsight: 5.30

Structure Conditions

Unknown
TOR 4.80

Culvert Data

Upstream Invert Elevation: 1,210.50
Channel Bank Elevation: 1,222.70

Channel Top Width: 15.00
Channel Bottom Width: 5.00



Looking At: UPSTREAM FACE

Barrels:	Rod Height	Invert Elevation	Shape	Rise	Span
	17.10	1,210.40	Elliptical	8.00	10.00
	16.20	1,211.30	Elliptical	8.00	10.00
	16.50	1,211.00	Elliptical	8.00	10.00



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_MC_26
Stream Name: Marne Creek
Stream Station: 0.00
Hydraulic Length: 53.00

Optional Data

Road Name: W 23rd St
Comments: Concrete
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,220.15
Top of Road Elevation: 1,216.95
Backsight: 2.00

Structure Conditions

Unknown
TOR 5.20

Culvert Data

Upstream Invert Elevation: 1,213.65
Channel Bank Elevation: 1,217.85

Channel Top Width: 18.00
Channel Bottom Width: 9.00



Looking At: UPSTREAM CHANNEL

Barrels:	Rod Height	Invert Elevation	Shape	Rise	Span
	9.50	1,212.65	Circular	3.00	3.00
	9.50	1,212.65	Circular	3.00	3.00



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_MC_28
Stream Name: Marne Creek
Stream Station: 0.00
Hydraulic Length: 70.00

Optional Data

Road Name: Private Drive
Comments: Concrete
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,224.47
Top of Road Elevation: 1,224.77
Backsight: 5.60

Structure Conditions

Unknown

TOR 5.30

Culvert Data

Upstream Invert Elevation: 1,216.87
Channel Bank Elevation: 1,223.37

Channel Top Width: 50.00
Channel Bottom Width: 15.00



Looking At: UPSTREAM FACE

Barrels:	<u>Rod Height</u>	<u>Invert Elevation</u>	<u>Shape</u>	<u>Rise</u>	<u>Span</u>
	13.70	1,216.37	Box	5.80	11.00
	13.70	1,216.37	Box	5.80	11.00



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_MC_30
Stream Name: Marne Creek
Stream Station: 0.00
Hydraulic Length: 90.00

Optional Data

Road Name: 439th Ave
Comments: Concrete
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,245.00
Top of Road Elevation: 1,245.10
Backsight: 4.70

Structure Conditions

Unknown
TOR 4.60

Culvert Data

Upstream Invert Elevation: 1,235.30
Channel Bank Elevation: 1,240.30

Channel Top Width: 30.00
Channel Bottom Width: 10.00



Looking At: UPSTREAM FACE

Barrels:	Rod Height	Invert Elevation	Shape	Rise	Span
	14.50	1,235.20	Box	7.00	14.00
	14.50	1,235.20	Box	7.00	14.00



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_UNT55_01
Stream Name: Unnamed Tributary 55
Stream Station: 0.00
Hydraulic Length: 58.00

Optional Data

Road Name: 431st Ave
Comments: CMP
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,184.64
Top of Road Elevation: 1,184.74
Backsight: 5.30

Structure Conditions

Unknown
TOR 5.20

Culvert Data

Upstream Invert Elevation: 1,173.94
Channel Bank Elevation: 1,180.64

Channel Top Width: 33.00
Channel Bottom Width: 18.00



Looking At: UPSTREAM FACE

Barrels:	<u>Rod Height</u>	<u>Invert Elevation</u>	<u>Shape</u>	<u>Rise</u>	<u>Span</u>
	16.80	1,173.14	Elliptical	6.00	4.50



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_UNT55_01.2
Stream Name: Unnamed Tributary 55
Stream Station: 0.00
Hydraulic Length: 39.00

Optional Data

Road Name: Farm Road
Comments: Steel
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,184.64
Top of Road Elevation: 1,182.94
Backsight: 5.30

Structure Conditions

Unknown

TOR 7.00

Culvert Data

Upstream Invert Elevation: 1,173.34
Channel Bank Elevation: 1,178.64

Channel Top Width: 33.00
Channel Bottom Width: 18.00



Looking At: UPSTREAM FACE

Barrels:	<u>Rod Height</u>	<u>Invert Elevation</u>	<u>Shape</u>	<u>Rise</u>	<u>Span</u>
	16.80	1,173.14	Circular	3.00	3.00



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(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_UNT66_01
Stream Name: Unnamed Tributary 66
Stream Station: 0.00
Hydraulic Length: 40.00

Optional Data

Road Name: NE Jim River Rd
Comments: CMP
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,180.10
Top of Road Elevation: 1,179.80
Backsight: 4.80

Structure Conditions

Unknown
TOR 5.10

Culvert Data

Upstream Invert Elevation: 1,170.10
Channel Bank Elevation: 1,176.90

Channel Top Width: 20.00
Channel Bottom Width: 8.00



Looking At: UPSTREAM FACE

Barrels:	<u>Rod Height</u>	<u>Invert Elevation</u>	<u>Shape</u>	<u>Rise</u>	<u>Span</u>
	14.70	1,170.20	Circular	6.00	6.00



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_UNT67_01
Stream Name: Unnamed Tributary 67
Stream Station: 0.00
Hydraulic Length: 48.00

Optional Data

Road Name: NE Jim River Rd
Comments: CMP
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,181.17
Top of Road Elevation: 1,181.27
Backsight: 5.10

Structure Conditions

Unknown
TOR 5.00

Culvert Data

Upstream Invert Elevation: 1,174.77
Channel Bank Elevation: 1,178.27

Channel Top Width: 16.00
Channel Bottom Width: 8.00



Looking At: UPSTREAM FACE

Barrels:	<u>Rod Height</u>	<u>Invert Elevation</u>	<u>Shape</u>	<u>Rise</u>	<u>Span</u>
	11.50	1,174.77	Circular	4.50	4.50



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_UNT69_02
Stream Name: Unnamed Tributary 69
Stream Station: 0.00
Hydraulic Length: 80.00

Optional Data

Road Name: 436th Ave
Comments: Concrete
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,393.69
Top of Road Elevation: 1,393.99
Backsight: 5.00

Structure Conditions

Unknown
TOR 4.70

Culvert Data

Upstream Invert Elevation: 1,384.39
Channel Bank Elevation: 1,385.69

Channel Top Width: 12.00
Channel Bottom Width: 4.00



Looking At: UPSTREAM FACE

Barrels:	<u>Rod Height</u>	<u>Invert Elevation</u>	<u>Shape</u>	<u>Rise</u>	<u>Span</u>
	13.90	1,384.79	Circular	2.50	2.50



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_UNT69_03
Stream Name: Unnamed Tributary 69
Stream Station: 0.00
Hydraulic Length: 30.00

Optional Data

Road Name: Private Drive
Comments: CMP
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,397.02
Top of Road Elevation: 1,397.22
Backsight: 5.00

Structure Conditions

Unknown

TOR 4.80

Culvert Data

Upstream Invert Elevation: 1,393.22
Channel Bank Elevation: 1,394.72

Channel Top Width: 30.00
Channel Bottom Width: 20.00



Looking At: UPSTREAM FACE

Barrels:	<u>Rod Height</u>	<u>Invert Elevation</u>	<u>Shape</u>	<u>Rise</u>	<u>Span</u>
	9.90	1,392.12	Circular	3.00	3.00



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_UNT70_07
Stream Name: Unnamed Tributary 70
Stream Station: 0.00
Hydraulic Length: 212.00

Optional Data

Road Name: Donohoe Blvd
Comments: Concrete
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,213.53
Top of Road Elevation: 1,212.93
Backsight: 4.60

Structure Conditions

Unknown
TOR 5.20

Culvert Data

Upstream Invert Elevation: 1,206.53
Channel Bank Elevation: 1,213.33

Channel Top Width: 43.00
Channel Bottom Width: 7.00



Looking At: UPSTREAM FACE

Barrels:	<u>Rod Height</u>	<u>Invert Elevation</u>	<u>Shape</u>	<u>Rise</u>	<u>Span</u>
	10.90	1,207.23	Circular	4.00	4.00



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_UNT70_09
Stream Name: Unnamed Tributary 70
Stream Station: 0.00
Hydraulic Length: 96.00

Optional Data

Road Name: 29th St
Comments: Concrete
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,218.03
Top of Road Elevation: 1,218.03
Backsight: 4.40

Structure Conditions

Unknown
TOR 4.40

Culvert Data

Upstream Invert Elevation: 1,212.13
Channel Bank Elevation: 1,215.33

Channel Top Width: 46.00
Channel Bottom Width: 23.00



Looking At: UPSTREAM FACE

Barrels:	<u>Rod Height</u>	<u>Invert Elevation</u>	<u>Shape</u>	<u>Rise</u>	<u>Span</u>
	10.50	1,211.93	Elliptical	3.20	5.00



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_UNT70_10
Stream Name: Unnamed Tributary 70
Stream Station: 0.00
Hydraulic Length: 90.00

Optional Data

Road Name: 29th St
Comments: Concrete
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,234.09
Top of Road Elevation: 1,233.79
Backsight: 3.00

Structure Conditions

Unknown
TOR 3.30

Culvert Data

Upstream Invert Elevation: 1,228.09
Channel Bank Elevation: 1,233.59

Channel Top Width: 30.00
Channel Bottom Width: 7.00



Looking At: UPSTREAM FACE

Barrels:	Rod Height	Invert Elevation	Shape	Rise	Span
	8.20	1,228.89	Elliptical	2.00	3.00
	8.40	1,228.69	Elliptical	2.00	3.00



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_UNT71_0.5
Stream Name: Unnamed Tributary 71
Stream Station: 0.00
Hydraulic Length: 30.00

Optional Data

Road Name: Footpath
Comments: Concrete
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,210.07
Top of Road Elevation: 1,204.77
Backsight: 5.00

Structure Conditions

Unknown

TOR 10.30

Culvert Data

Upstream Invert Elevation: 1,201.07
Channel Bank Elevation: 1,205.27

Channel Top Width: 20.00
Channel Bottom Width: 8.00



Looking At: UPSTREAM FACE

Barrels:	Rod Height	Invert Elevation	Shape	Rise	Span
14.00		1,201.07	Box	2.00	3.00
14.00		1,201.07	Box	2.00	3.00



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_UNT71_01
Stream Name: Unnamed Tributary 71
Stream Station: 0.00
Hydraulic Length: 105.00

Optional Data

Road Name: W 21st St
Comments: Concrete
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,222.87
Top of Road Elevation: 1,223.17
Backsight: 4.60

Structure Conditions

Unknown
TOR 4.30

Culvert Data

Upstream Invert Elevation: 1,213.37
Channel Bank Elevation: 1,220.47

Channel Top Width: 40.00
Channel Bottom Width: 10.00



Looking At: UPSTREAM FACE

Barrels:	Rod Height	Invert Elevation	Shape	Rise	Span
	13.30	1,214.17	Elliptical	6.00	9.50
	13.00	1,214.47	Elliptical	6.00	9.50



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_UNT71_02
Stream Name: Unnamed Tributary 71
Stream Station: 0.00
Hydraulic Length: 90.00

Optional Data

Road Name: Kellen Gross Dr
Comments: Concrete
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,227.77
Top of Road Elevation: 1,228.17
Backsight: 6.00

Structure Conditions

Unknown
TOR 5.60

Culvert Data

Upstream Invert Elevation: 1,221.57
Channel Bank Elevation: 1,228.27

Channel Top Width: 70.00
Channel Bottom Width: 10.00



Looking At: UPSTREAM FACE

Barrels:	Rod Height	Invert Elevation	Shape	Rise	Span
	11.70	1,222.07	Box	2.70	10.00
	11.70	1,222.07	Box	2.70	10.00
	11.70	1,222.07	Box	2.70	10.00



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_UNT71_03
Stream Name: Unnamed Tributary 71
Stream Station: 0.00
Hydraulic Length: 27.00

Optional Data

Road Name: W 21st St
Comments: Concrete
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,232.78
Top of Road Elevation: 1,232.18
Backsight: 4.20

Structure Conditions

Unknown
TOR 4.80

Culvert Data

Upstream Invert Elevation: 1,226.58
Channel Bank Elevation: 1,231.98

Channel Top Width: 60.00
Channel Bottom Width: 10.00



Looking At: UPSTREAM FACE

Barrels:	Rod Height	Invert Elevation	Shape	Rise	Span
	10.50	1,226.48	Box	2.70	10.00
	10.50	1,226.48	Box	2.70	10.00
	10.50	1,226.48	Box	2.70	10.00



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_UNT71_04
Stream Name: Unnamed Tributary 71
Stream Station: 0.00
Hydraulic Length: 83.00

Optional Data

Road Name: W City Limits Rd
Comments: CMP
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,235.06
Top of Road Elevation: 1,235.06
Backsight: 3.60

Structure Conditions

Unknown
TOR 3.60

Culvert Data

Upstream Invert Elevation: 1,228.16
Channel Bank Elevation: 1,229.86

Channel Top Width: 40.00
Channel Bottom Width: 10.00



Looking At: UPSTREAM FACE

Barrels:	Rod Height	Invert Elevation	Shape	Rise	Span
	10.60	1,228.06	Circular	5.00	5.00
	10.50	1,228.16	Circular	5.00	5.00
	10.50	1,228.16	Circular	5.00	5.00



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_UNT72_01
Stream Name: Unnamed Tributary 72
Stream Station: 0.00
Hydraulic Length: 28.00

Optional Data

Road Name: Private Drive
Comments: CMP
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,159.79
Top of Road Elevation: 1,159.89
Backsight: 5.20

Structure Conditions

Unknown

TOR 5.10

Culvert Data

Upstream Invert Elevation: 1,155.69
Channel Bank Elevation: 1,158.09

Channel Top Width: 30.00
Channel Bottom Width: 5.00



Looking At: UPSTREAM FACE

Barrels:	<u>Rod Height</u>	<u>Invert Elevation</u>	<u>Shape</u>	<u>Rise</u>	<u>Span</u>
	9.30	1,155.69	Circular	1.50	1.50



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_UNT75_04
Stream Name: Unnamed Tributary 75
Stream Station: 0.00
Hydraulic Length: 15.00

Optional Data

Road Name: Footpath
Comments: Concrete
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,210.00
Top of Road Elevation: 1,210.50
Backsight: 5.60

Structure Conditions

Unknown
TOR 5.10

Culvert Data

Upstream Invert Elevation: 1,203.60
Channel Bank Elevation: 1,209.80

Channel Top Width: 73.00
Channel Bottom Width: 60.00



Looking At: UPSTREAM FACE

Barrels:	Rod Height	Invert Elevation	Shape	Rise	Span
	12.70	1,202.90	Circular	2.00	2.00



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_UNT75_52
Stream Name: Unnamed Tributary 75
Stream Station: 0.00
Hydraulic Length: 64.00

Optional Data

Road Name: Burleigh St
Comments: Concrete
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,198.73
Top of Road Elevation: 1,198.63
Backsight: 5.20

Structure Conditions

Unknown
TOR 5.30

Culvert Data

Upstream Invert Elevation: 1,194.03
Channel Bank Elevation: 1,198.23

Channel Top Width: 50.00
Channel Bottom Width: 20.00



Looking At: UPSTREAM FACE

Barrels:	Rod Height	Invert Elevation	Shape	Rise	Span
	9.60	1,194.33	Box	2.40	8.00
	9.60	1,194.33	Box	2.40	8.00



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_UNT75_54
Stream Name: Unnamed Tributary 75
Stream Station: 0.00
Hydraulic Length: 165.00

Optional Data

Road Name: 29th St
Comments: Concrete
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,245.53
Top of Road Elevation: 1,246.13
Backsight: 5.00

Structure Conditions

Unknown
TOR 4.40

Culvert Data

Upstream Invert Elevation: 1,235.33
Channel Bank Elevation: 1,247.23

Channel Top Width: 115.00
Channel Bottom Width: 20.00



Looking At: UPSTREAM FACE

Barrels:	Rod Height	Invert Elevation	Shape	Rise	Span
	15.00	1,235.53	Circular	3.00	3.00



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_UNT75_55
Stream Name: Unnamed Tributary 75
Stream Station: 0.00
Hydraulic Length: 150.00

Optional Data

Road Name: 29th St
Comments: Concrete
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,235.17
Top of Road Elevation: 1,235.37
Backsight: 5.90

Structure Conditions

Unknown
TOR 5.70

Culvert Data

Upstream Invert Elevation: 1,230.67
Channel Bank Elevation: 1,235.37

Channel Top Width: 100.00
Channel Bottom Width: 80.00



Looking At: UPSTREAM FACE

Barrels:	Rod Height	Invert Elevation	Shape	Rise	Span
	10.10	1,230.97	Circular	2.50	2.50
	10.10	1,230.97	Elliptical	2.50	4.00
	10.10	1,230.97	Elliptical	2.50	4.00



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_UNT78_01
Stream Name: Unnamed Tributary 78
Stream Station: 0.00
Hydraulic Length: 122.00

Optional Data

Road Name: W 25th St
Comments: Concrete
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,226.28
Top of Road Elevation: 1,226.08
Backsight: 5.00

Structure Conditions

Unknown
TOR 5.20

Culvert Data

Upstream Invert Elevation: 1,221.98
Channel Bank Elevation: 1,224.28

Channel Top Width: 21.00
Channel Bottom Width: 6.00



Looking At: UPSTREAM FACE

Barrels:	Rod Height	Invert Elevation	Shape	Rise	Span
	9.60	1,221.68	Elliptical	3.00	5.00
	9.60	1,221.68	Elliptical	3.00	5.00



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_UNT78_04
Stream Name: Unnamed Tributary 78
Stream Station: 0.00
Hydraulic Length: 35.00

Optional Data

Road Name: Private Drive
Comments: CMP
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,239.88
Top of Road Elevation: 1,240.48
Backsight: 5.20

Structure Conditions

Unknown

TOR 4.60

Culvert Data

Upstream Invert Elevation: 1,238.18
Channel Bank Elevation: 1,239.08

Channel Top Width: 5.00
Channel Bottom Width: 1.00



Looking At: UPSTREAM FACE

Barrels:	<u>Rod Height</u>	<u>Invert Elevation</u>	<u>Shape</u>	<u>Rise</u>	<u>Span</u>
	7.00	1,238.08	Circular	2.00	2.00



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_UNT78_05
Stream Name: Unnamed Tributary 78
Stream Station: 0.00
Hydraulic Length: 104.00

Optional Data

Road Name: Private Drive
Comments: CMP
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,246.42
Top of Road Elevation: 1,246.72
Backsight: 5.10

Structure Conditions

Unknown

TOR 4.80

Culvert Data

Upstream Invert Elevation: 1,243.42
Channel Bank Elevation: 1,244.32

Channel Top Width: 10.00
Channel Bottom Width: 2.00



Looking At: UPSTREAM FACE

Barrels:	Rod Height	Invert Elevation	Shape	Rise	Span
8.30	1,243.22	Circular	2.00	2.00	



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_UNT78_07
Stream Name: Unnamed Tributary 78
Stream Station: 0.00
Hydraulic Length: 16.00

Optional Data

Road Name: 31st St
Comments: CMP
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,262.10
Top of Road Elevation: 1,263.90
Backsight: 7.00

Structure Conditions

Unknown
TOR 5.20

Culvert Data

Upstream Invert Elevation: 1,260.50
Channel Bank Elevation: 1,261.80

Channel Top Width: 6.00
Channel Bottom Width: 2.00



Looking At: UPSTREAM FACE

Barrels:	Rod Height	Invert Elevation	Shape	Rise	Span
	8.20	1,260.90	Circular	2.00	2.00
	8.40	1,260.70	Elliptical	2.00	3.50



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_UNT78_08
Stream Name: Unnamed Tributary 78
Stream Station: 0.00
Hydraulic Length: 154.00

Optional Data

Road Name: 31st St
Comments: Concrete
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,277.50
Top of Road Elevation: 1,277.30
Backsight: 3.00

Structure Conditions

Unknown

TOR 3.20

Culvert Data

Upstream Invert Elevation: 1,264.40
Channel Bank Elevation: 1,265.10

Channel Top Width: 8.00
Channel Bottom Width: 2.00



Looking At: UPSTREAM FACE

Barrels:	Rod Height	Invert Elevation	Shape	Rise	Span
	16.30	1,264.20	Circular	4.50	4.50



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_UNT78_09
Stream Name: Unnamed Tributary 78
Stream Station: 0.00
Hydraulic Length: 26.00

Optional Data

Road Name: Private Drive
Comments: Steel
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,283.07
Top of Road Elevation: 1,284.37
Backsight: 6.00

Structure Conditions

Unknown

TOR 4.70

Culvert Data

Upstream Invert Elevation: 1,282.47
Channel Bank Elevation: 1,283.07

Channel Top Width: 7.00
Channel Bottom Width: 1.00



Looking At: UPSTREAM FACE

Barrels:	Rod Height	Invert Elevation	Shape	Rise	Span
6.60	1,282.47	Circular	1.30	1.30	



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_YCD_01
Stream Name: Yankton Clay Ditch
Stream Station: 0.00
Hydraulic Length: 30.00

Optional Data

Road Name: 312th St
Comments: Concrete
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,163.51
Top of Road Elevation: 1,163.41
Backsight: 4.80

Structure Conditions

Unknown
TOR 4.90

Culvert Data

Upstream Invert Elevation: 1,152.11
Channel Bank Elevation: 1,162.21

Channel Top Width: 30.00
Channel Bottom Width: 7.00



Looking At: UPSTREAM FACE

Barrels:	<u>Rod Height</u>	<u>Invert Elevation</u>	<u>Shape</u>	<u>Rise</u>	<u>Span</u>
	17.30	1,151.01	Box	8.00	8.00



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_YCD_02
Stream Name: Yankton Clay Ditch
Stream Station: 0.00
Hydraulic Length: 26.00

Optional Data

Road Name: 451st Ave
Comments: Concrete
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,163.70
Top of Road Elevation: 1,164.10
Backsight: 5.20

Structure Conditions

Unknown
TOR 4.80

Culvert Data

Upstream Invert Elevation: 1,151.90
Channel Bank Elevation: 1,162.90

Channel Top Width: 33.00
Channel Bottom Width: 7.00



Looking At: UPSTREAM FACE

Barrels:	<u>Rod Height</u>	<u>Invert Elevation</u>	<u>Shape</u>	<u>Rise</u>	<u>Span</u>
	18.10	1,150.80	Box	8.00	8.00



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Approximate Culvert Report

(All Units in Feet) Hdatum = NAD 1983 StatePlane South Dakota South FIPS 4002 F : VDatum = NAVD88

General

Structure Name: LDS_YCD_03
Stream Name: Yankton Clay Ditch
Stream Station: 0.00
Hydraulic Length: 42.00

Optional Data

Road Name: 451st Ave
Comments: Concrete
DOT ID:
Associated TOR Xsect: Not Selected
Associated US Xsect: Not Selected

Vertical Control

Vertical Control Elevation: 1,163.63
Top of Road Elevation: 1,164.13
Backsight: 4.80

Structure Conditions

Unknown
TOR 4.30

Culvert Data

Upstream Invert Elevation: 1,152.23
Channel Bank Elevation: 1,163.43

Channel Top Width: 38.00
Channel Bottom Width: 9.00



Looking At: UPSTREAM FACE

Barrels:	<u>Rod Height</u>	<u>Invert Elevation</u>	<u>Shape</u>	<u>Rise</u>	<u>Span</u>
	17.40	1,151.03	Box	10.00	8.00