

Department of Transportation
 Division of Secretariat
 Office of Air, Rail & Transit
 700 East Broadway Avenue
 Pierre, South Dakota 57501-2586
 OFFICE: 605/773-3574
 FAX: 605/773-2804

TO: South Dakota Aeronautics Commission

FROM: Jack Dokken, Program Manager
 Office of Air, Rail, and Transit

DATE: June 20, 2017

SUBJECT: Financial Assistance Agreements

The Office of Aeronautics is requesting funding from the State Aeronautics Fund for the AIP projects below.

Brookings 3-46-0005-029-2017

Reconstruction of runway 17/35 (1700' X 60')

Federal Share	\$ 810,000.00
State Share	\$ 45,000.00
Local Share	\$ 45,000.00
Total	\$ 900,000.00

The Department recommends approval of state assistance in the amount of \$45,000.00.

Gregory 3-46-0018-014-2017

Construction of apron expansion, including admin, engineering and testing.

Federal Share	\$ 297,000.00
State Share	\$ 16,500.00
Local Share	\$ 16,500.00
Total	\$ 330,000.00

The Department recommends approval of state assistance in the amount of \$16,500.00.

Huron 3-46-0022-035-2017

Repair shoulders on runway 12/30, replace taxiway A, building removal and reclamation, RPZ grading for mitigated wetland removal.

Federal Share	\$3,521,012.00
State Share	\$ 195,612.00
Local Share	\$ 195,612.00
 Total	 \$ 3,912,236.00

The Department recommends approval of state assistance in the amount of \$195,612.00.

Madison 3-46-0029-015-2017

Design for parallel taxiway to 15-33 and medium intensity taxiway lighting (7200 SY).

Federal Share	\$ 68,400.00
State Share	\$ 3,800.00
Local Share	\$ 3,800.00
 Total	 \$ 76,000.00

The Department recommends approval of state assistance in the amount of \$3,800.00.

Parkston 3-46-0042-012-2017

Land appraisal and acquisition for hangar area expansion (11 acres).

Federal Share	\$ 144,000.00
State Share	\$ 8,000.00
Local Share	\$ 8,000.00
 Total	 \$ 160,000.00

The Department recommends approval of state assistance in the amount of \$8,000.00.

Vermillion 3-46-0056-012-2017

Construction, administration, engineering and testing for apron reconstruction and PAPI replacement.

Federal Share	\$ 559,800.00
State Share	\$ 31,100.00
Local Share	\$ 31,100.00
 Total	 \$ 622,000.00

The Department recommends approval of state assistance in the amount of \$31,100.00.

Watertown 3-46-0058-031-2017

Planning document for Airport compliance; ADA access improvements at terminal building.

Federal Share	\$ 99,000.00
State Share	\$ 5,500.00
Local Share	\$ 5,500.00
 Total	 \$ 110,000.00

The Department recommends approval of state assistance in the amount of \$5,500.00.

Webster 3-46-0059-009-2017

Reconstruction of runway 12/30, including engineering and testing for runway, apron and connector reconstruction.

Federal Share	\$ 1,998,000.00
State Share	\$ 111,000.00
Local Share	\$ 111,000.00
 Total	 \$ 2,220,000.00

The Department recommends approval of state assistance in the amount of \$111,000.00.

Winner 3-46-0061-015-2017

Construction of apron expansion, including engineering, admin and testing.

Federal Share	\$ 436,500.00
State Share	\$ 24,250.00
Local Share	\$ 24,250.00
Total	\$ 485,000.00

The Department recommends approval of state assistance in the amount of \$24,250.00.

PAPI-2 REPLACEMENT

The PAPI-2 units were installed in 2005 and have had increased maintenance issues for the last several years. The wiring to the PAPIs is sufficient, however the PAPI units themselves are in constant need of repair. The City has had to replace a number of motherboards that cost \$1,400 each time.

APRON IMPROVEMENTS
 HAROLD DAVIDON FIELD
 VERMILLION, SOUTH DAKOTA
 AIP #3-46-0056-012-2017

A-6177

BID TABULATION

6/7/2017

Item #	Spec #	Item Description	Quantity	Unit	Midland Contracting, Inc. Huron, SD		VanderPol Dragline, Inc. Mitchell, SD		Double H Paving, Inc. Tea, SD	
					Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price
1	GP-105	Mobilization	1	L.S.	\$67,500.00	\$67,500.00	\$56,800.00	\$56,800.00	\$85,000.00	\$85,000.00
2	GP-50	Construction Staking	1	L.S.	\$7,500.00	\$7,500.00	\$5,800.00	\$5,800.00	\$15,000.00	\$15,000.00
3	S-100	Construction Safety Phasing Plan	1	L.S.	\$4,500.00	\$4,500.00	\$4,400.00	\$4,400.00	\$10,000.00	\$10,000.00
4	P-152	Unclassified Excavation	4,765	CuYd	\$6.00	\$28,590.00	\$6.15	\$29,304.75	\$4.80	\$22,872.00
5	P-152	Disposal of Excess Material	1,047	CuYd	\$3.00	\$3,141.00	\$2.10	\$2,198.70	\$3.20	\$3,350.40
6	P-208 (MOD)	Aggregate Base Course	1,363	CuYd	\$38.00	\$51,794.00	\$49.75	\$67,809.25	\$50.00	\$68,150.00
7	P-403	Bituminous Base/Surface Course	1,391.0	Ton	\$115.50	\$160,660.50	\$118.80	\$165,250.80	\$110.00	\$153,010.00
8	P-602	Bituminous Prime Coat	10.3	Ton	\$428.40	\$4,412.52	\$460.00	\$4,738.00	\$700.00	\$7,210.00
9	P-603	Bituminous Tack Coat	3.5	Ton	\$431.00	\$1,508.50	\$470.00	\$1,645.00	\$1,000.00	\$3,500.00
10	P-620	Taxiway Marking	1	L.S.	\$6,275.00	\$6,275.00	\$7,500.00	\$7,500.00	\$7,000.00	\$7,000.00
11	D-701	15" RCP	290	Ft	\$49.50	\$14,355.00	\$29.00	\$8,410.00	\$35.50	\$10,295.00
12	D-701	15" RCP Flared End	1	Each	\$942.35	\$942.35	\$756.00	\$756.00	\$570.00	\$570.00
13	D-701	12" PVC	125	Ft	\$39.33	\$4,916.25	\$25.00	\$3,125.00	\$30.20	\$3,775.00
14	D-701	12" RCP Flared End	1	Each	\$1,363.04	\$1,363.04	\$655.00	\$655.00	\$440.00	\$440.00
15	D-751	2' x 3' Type B Storm Sewer Inlet w/Type E Frame and Grate	3	Each	\$4,500.00	\$13,500.00	\$3,900.00	\$11,700.00	\$1,885.00	\$5,655.00
16	T-901	Seeding and Fertilizing	1.0	Acre	\$1,575.00	\$1,575.00	\$1,200.00	\$1,200.00	\$1,075.00	\$1,075.00
17	T-905	Topsailing	250	CuYd	\$5.00	\$1,250.00	\$15.00	\$3,750.00	\$10.75	\$2,687.50
18	TL-100	Field Laboratory, Type I	1	Each	\$4,500.00	\$4,500.00	\$4,200.00	\$4,200.00	\$12,000.00	\$12,000.00
19	SP-1	Full Depth Reclamation (7" Nominal Depth)	7,974	SqYd	\$2.75	\$21,928.50	\$1.60	\$12,758.40	\$1.95	\$15,549.30
20	SP-1	Remove and Relay Blended Material (6" Nominal Depth)	7,974	SqYd	\$2.20	\$17,542.80	\$3.20	\$25,516.80	\$1.85	\$14,751.90
21	Plans	Remove and Dispose of Trench Drain	250	Ft	\$5.00	\$1,250.00	\$6.00	\$1,500.00	\$5.35	\$1,337.50
22	Plans	Remove and Dispose of CMP Storm Sewer	162	Ft	\$20.00	\$3,240.00	\$8.00	\$1,296.00	\$7.50	\$1,215.00
23	Plans	Remove and Dispose of Concrete Aircraft Tie Down	26	Each	\$75.00	\$1,950.00	\$50.00	\$1,300.00	\$80.90	\$2,103.40
24	Plans	Aircraft Tie Downs	9	Sets	\$1,350.00	\$12,150.00	\$1,300.00	\$11,700.00	\$1,100.00	\$9,900.00
25	Plans	6' Concrete Valley Gutter	1,272	SqFt	\$8.75	\$11,130.00	\$9.50	\$12,084.00	\$8.00	\$10,176.00
26	Plans	Reinforced Concrete Fuel Spill Pad	720	SqFt	\$18.90	\$13,608.00	\$20.50	\$14,760.00	\$7.50	\$5,400.00
27	Plans	Reinforced Concrete Fuel Containment	1	L.S.	\$13,750.00	\$13,750.00	\$16,500.00	\$16,500.00	\$13,000.00	\$13,000.00
28	Plans	12" PVC 90° Bend	1	Each	\$759.77	\$759.77	\$350.00	\$350.00	\$315.00	\$315.00
29	Plans	12" PVC Tee	1	Each	\$859.01	\$859.01	\$450.00	\$450.00	\$455.00	\$455.00

Base Bid				Midland Contracting, Inc. Huron, SD		VanderPol Dragline, Inc. Mitchell, SD		Double H Paving, Inc. Tea, SD		
Item #	Spec #	Item Description	Quantity	Unit	Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price
30	Plans	12" Gate Valve w/Position Indicator	1	Each	\$3,957.20	\$3,957.20	\$3,900.00	\$3,900.00	\$3,500.00	\$3,500.00
31	Plans	High Flow Silt Fence	130	Ft	\$5.25	\$682.50	\$7.00	\$910.00	\$5.35	\$695.50
32	L-100	Demolition, Incidental Electrical	1	L.S.	\$1,100.00	\$1,100.00	\$1,100.00	\$1,100.00	\$1,100.00	\$1,100.00
33	L-340	L-881 PAPI System Complete	2	Each	\$16,500.00	\$33,000.00	\$16,911.00	\$33,822.00	\$16,500.00	\$33,000.00
Total Base Bid						\$515,190.94		\$517,189.70		\$524,088.50

I HEREBY CERTIFY THAT THE FOREGOING IS AN ACCURATE REPRESENTATION AND TABULATION OF ALL BIDS RECEIVED AND THAT THE MATHEMATICS HAVE BEEN CHECKED AND IS TO THE BEST OF MY KNOWLEDGE CORRECT:

PROJECT ENGINEER: Michael A. Schmitz DATE: 6-7-2017

Helms & ASSOCIATES

CIVIL ENGINEERS & LAND SURVEYORS

221 Brown County Hwy 19
P.O. Box 111
Aberdeen, SD 57402

Phone: (605) 225-1212 Fax: (605) 225-3189
Email: operations@helmsengineering.com

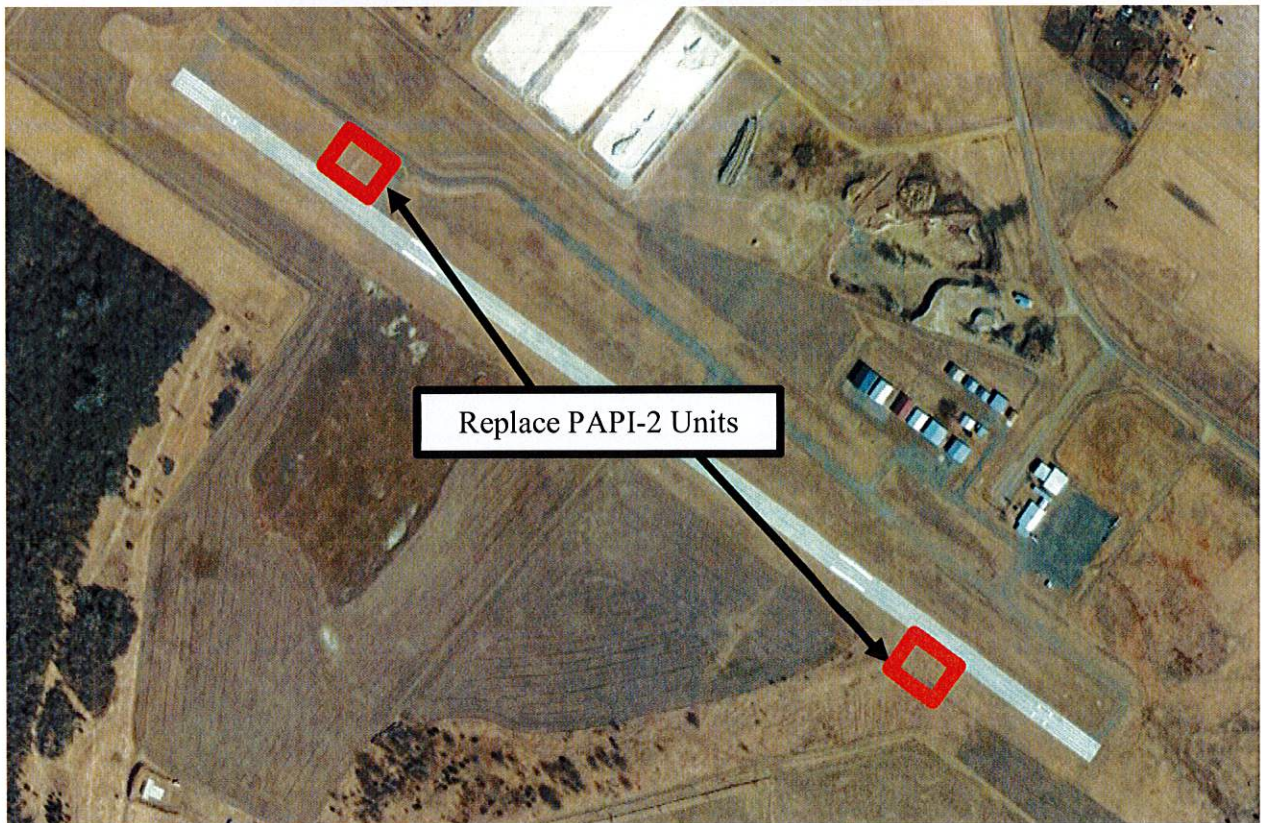
**Apron Improvements
Harold Davidson Field
Vermillion, South Dakota
AIP #3-46-0056-012-2017
Helms # A-6177
Revised Engineer's Estimate
June, 2017**

Base Bid

Item #	Spec #	Item Description	Quantity	Unit	Unit Price	Total Cost
1	GP-105	Mobilization	1	L.S.	\$67,500.00	\$67,500.00
2	GP-50	Construction Staking	1	L.S.	\$7,500.00	\$7,500.00
3	S-100	Construction Safety Phasing Plan	1	L.S.	\$4,500.00	\$4,500.00
4	P-152	Unclassified Excavation	4,765	CuYd	\$6.00	\$28,590.00
5	P-152	Disposal of Excess Material	1,047	CuYd	\$3.00	\$3,141.00
6	P-208 (MOD)	Aggregate Base Course	1,363	CuYd	\$38.00	\$51,794.00
7	P-403	Bituminous Base/Surface Course	1,391.0	Tons	\$115.50	\$160,660.50
8	P-602	Bituminous Prime Coat	10.3	Tons	\$428.40	\$4,412.52
9	P-603	Bituminous Tack Coat	3.5	Tons	\$431.00	\$1,508.50
10	P-620	Taxiway Marking	1	L.S.	\$6,275.00	\$6,275.00
11	D-701	15" RCP	290	Ft	\$49.50	\$14,355.00
12	D-701	15" RCP Flared End	1	Each	\$942.35	\$942.35
13	D-701	12" PVC	125	Ft	\$39.33	\$4,916.25
14	D-701	12" RCP Flared End	1	Each	\$1,363.04	\$1,363.04
15	D-751	2' x 3' Type B Storm Sewer Inlet w/Type E Frame and Grate	3	Each	\$4,500.00	\$13,500.00
16	T-901	Seeding and Fertilizing	1.0	Acre	\$1,575.00	\$1,575.00
17	T-905	Topsoiling	250	CuYd	\$5.00	\$1,250.00
18	TL-100	Field Laboratory, Type I	1	Each	\$4,500.00	\$4,500.00
19	SP-1	Full Depth Reclamation (7" Nominal Depth)	7,974	SqYd	\$2.75	\$21,928.50
20	SP-1	Remove and Relay Blended Material (6" Nominal Depth)	7,974	SqYd	\$2.20	\$17,542.80
21	Plans	Remove and Dispose of Trench Drain	250	Ft	\$5.00	\$1,250.00
22	Plans	Remove and Dispose of CMP Storm Sewer	162	Ft	\$20.00	\$3,240.00
23	Plans	Remove and Dispose of Concrete Aircraft Tie Down	26	Each	\$75.00	\$1,950.00
24	Plans	Aircraft Tie Downs	9	Sets	\$1,350.00	\$12,150.00
25	Plans	6' Concrete Valley Gutter	1,272	SqFt	\$8.75	\$11,130.00
26	Plans	Reinforced Concrete Fuel Spill Pad	720	SqFt	\$18.90	\$13,608.00
27	Plans	Reinforced Concrete Fuel Containment	1	L.S.	\$13,750.00	\$13,750.00
28	Plans	12" PVC 90° Bend	1	Each	\$759.77	\$759.77
29	Plans	12" PVC TEE	1	Each	\$859.01	\$859.01
30	Plans	12" Gate Valve w/Position Indicator	1	Each	\$3,957.20	\$3,957.20
31	Plans	High Flow Silt Fence	130	Ft	\$5.25	\$682.50
32	L-100	Demolition, Incidental Electrical	1	L.S.	\$1,100.00	\$1,100.00
33	L-340	L-881 PAPI System Complete	2	Each	\$16,500.00	\$33,000.00
Construction Total						\$515,190.94
Estimated Bidding & Negotiations						\$7,500.00
Estimated Construction Administration						\$25,000.00
Estimated Construction Engineering						\$40,000.00
Estimated Asphalt Testing						\$5,000.00
Estimated PAPI Flight Check						\$13,000.00
Estimated Administration (±3% of Construction Costs)						\$16,309.06
Total Estimated Project Cost						\$622,000.00

Project Sketch/Description

Harold Davidson Field
Vermillion, SD



Project Description:

Reconstruction of Apron with Fuel Containment Pad

PAPI - 2 Replacement

Project Narrative (Justification)

Apron Reconstruction

The southern apron is approximately 320' x 240' and was originally constructed in 1976 with 9" of compacted subgrade, 5" of P-208 and 2" of P-401 material. A slurry seal was placed on the apron in 1985 and 2 1/2" of P-401 was placed in 1993. The PCI value for the apron was 68 in 2012 and was reduced to 55 in 2015. The pavement has reached the end of its useful life and is in need of reconstruction. The photos depict the extensive cracking already on the apron.

