

CITY OF RAPID CITY

RAPID CITY, SOUTH DAKOTA 57701

Public Works Department **Engineering Services Division**

300 Sixth Street
Phone: 605-394-4154 Fax: 605-355-3083

TO:

Terry Wolterstorff and Public Works Committee

FROM:

Brandon Quiett

Engineering Project Engineer

DATE:

May 31, 2012

RE:

Infrastructure Acceptance

Cabelas Drive - GLM Subdivision No. 2

11PL008, DEV11-1048

Terry,

This letter is to confirm that the Cabelas Drive improvements, associated with GLM Subdivision No. 2, have been completed, tested, as-build have been submitted, warranty surety has been received, and the project can be accepted.

Per rapid City Ordinance 12.04.170(B) "Infrastructure Acceptance - The Public Works Director shall place on the Public Works Committee agenda an action item recommending acceptance of infrastructure when the project as a whole is ready for acceptance."

If you have any questions please let me know.

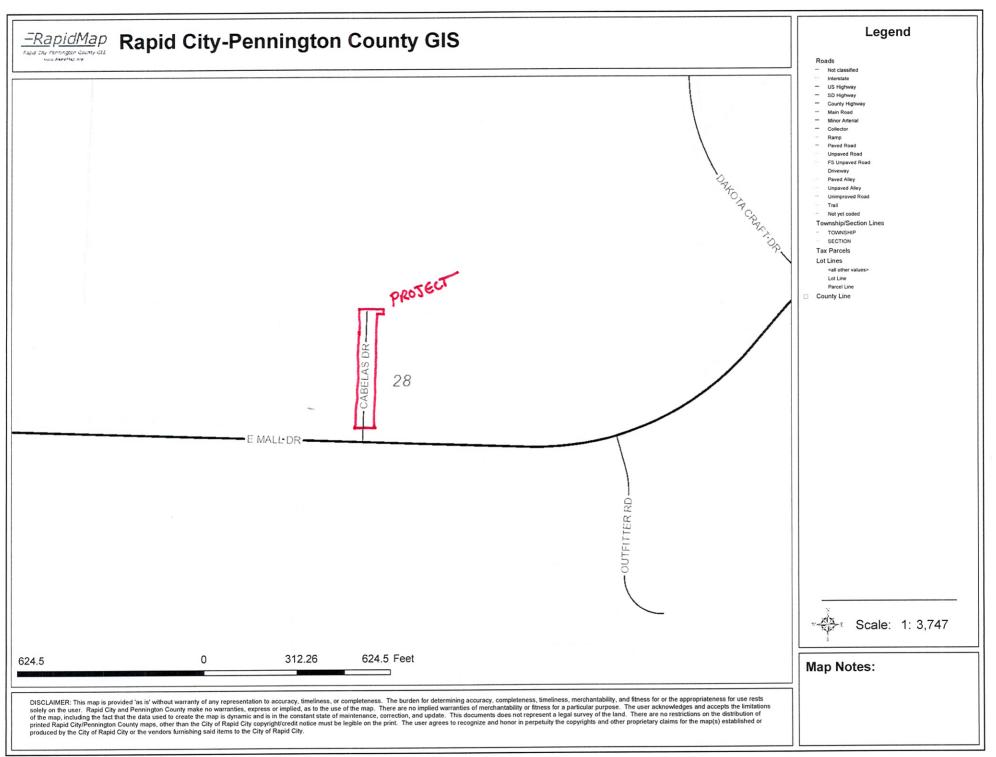
Sincerely,

Brandon Quiett, P.E Project Engineer

Attachments:

- 1. Vicinity Map
- 2. Cost estimate





SUBDIVISION IMPROVEMENTS ESTIMATE

Submitted by:	DREAM DESIGN INT. INC.		Terry Cash				
The Char	Developer Developer	Date:	5/3/2011				
two (2) years after the con materials which, in the jud	ched to and become a part of the petition of the work listed below, the Degment of the City Engineer, shalf become problems develop during the initial 2	eveloper shall make ne necessary during -year period.	all repairs arising out of defer said period. City reserves th	ctive workmanship			
ATTACH WORKSHEET AS NECESSARY							
1 See Attac	ITEM hed	QUANTITY (Units)	UNIT PRICE	ESTIMATED PI \$242,961.4			
2							
3 4							
. 5							
7							
8			,				
9							
11							
12				#040 OC4			
Subtotal TOTAL F	STIMATED COST			\$242,961.4 \$242,961.4			
SUBDIVIS	SION INSPECTION FEE (paid s	eparately to City	Finance Office):	1.5% \$3,6			
The C	t of \$ 240,96/.47 the posted upon submittal of the formatter than the submittal of the submittal of the formatter than the submittal of the submitted of the submittal	inal plat.	er installation of the abo				
Bond Record:		Amount	Date Filed or Renewed	Expiration D			
Dona Recoja.		Alloun	- Late 1 Head of I tellettes	ZAPII da on z			
·							
. Development Service	e Center:						
	e Center:	Inspected b	у:				
	on:	Inspected b					
Work completed of As-constructed place.	on:						
Work completed of As-constructed plane Permission is hereby	ans received: Yes	No					

CABELAS DRIVE 2011 ENGINEER'S ESTIMATED PROBABLE COST

					Engineers Estimate	
BID ITEM NO.	DESCRIPTION OF ITEM		UNIT	QTY	UNIT COST	TOTAL COST
	AS drive 2011					
100	MISCELLANEOUS				¢c 000 00	¢5 000 00
100	MOBILIZATION		LS LS	1	\$5,000.00 \$1,500.00	\$5,000.00 \$1,500.00
101	SURVEY		LS	1	\$1,500.00	
102 103	TESTING TRAFFIC CONTROL		LS	1	\$2,500.00	\$2,500.00
103	REMOVE CONCRETE CURB AND GUTTER		LF	46	\$6.82	\$313.72
104	NEWOVE CONCINETE CONSTITUTE CONTENT				\$0.02	V 0.101.12
	GRADING AND SURFACING					
200	UNCLASSIFIED EXCAVATION		CY	2400	\$3.00	\$7,200.00
201	TOPSOIL, STRIP, STOCKPILE & REPLACE		CY	972	\$10.00	\$9,720.00
202	SEEDING MULCHING AND FERTILIZING		ACRE	0.7	\$1,250.00	\$875.00
203	CONCRETE FILLET & PAN, 8" REINFORCED		SY	98.7	\$78.64	\$7,761.77
204	SIGNAGE AND STRIPING		LS	1	\$12,000.00	\$12,000.00
205	AGGREGATE BASE COURSE		T	753	\$22.09	\$16,633.77
206	GRAVEL SURFACING, PERMANENT		T	260	\$19.94	\$5,184.40
207	AC, CLASS E, TYPE 1 PG64-28		T	500	\$106.18	\$53,090.00
208	CONCRETE CURB & GUTTER, TYPE B6-6		LF	964	\$24.06	
209	CONCRETE SIDEWALK, 4" REINFORCED		SF	356.6	\$5.90	\$2,103.94
	WATER AND SEWER					
301	8" GATE VALVE w/box		EA	1	\$1,379.35	
302	8" 45 DEGREE BEND		EA	6	\$396.29	\$2,377.74
303	8" x 8" x 6" TEE		EA	1	\$459.79	
304	8" MJ PLUG		EA	1	\$196.13	
305	8" PVC WATER MAIN C-900, CLASS 150		LF	387	\$32.18	
306	FIRE HYDRANT ASSEMBLY		EA	1	\$3,668.68	
307	WATER MAIN ENCASEMENT		LF	100	\$1.00	
308	CONNECT TO EXISTING WATER MAIN		EA	1	\$1,607.41	
309	8" TRANSITIONAL COUPLING		EA	1	\$500.00	
310	6" PVC WATER SERVICE C-900/RJ, CLASS 150		LF	70	\$47.00	
311	CONNECT NEW SEWER SERVICE		EA	1 2	\$420.17	
312	ADJUST MANHOLE RING & COVER		EA		\$562.89	\$1,125.78
	DRAINAGE/STORM SEWER					
400	42" RCP, CLASS II, ARCH		LF	360	\$75.00	
401	42" RCP FLARED END, ARCH		EA	8	\$2,900.00	
402	CLASS 2 RIPRAP W/filter fabric		CY	80	\$40.00	
403	SPECIAL TYPE "B" INLET		EA	2	\$3,350.06	\$6,700.13
	EROSION & DUST CONTROL					
501	WATTELS 12"		LF	975	\$4.00	
502	ROCK CONSTRUCTION ENTERANCE		TN	20	\$140.31	
503	EROSION CONTROL PLAN		L\$	1	\$1,000.00	\$1,000.00
		TOTAL				\$242,961.4



FMG. INC. 3700 Sturgis Road, Rapid City, South Dakota 57702-0317 605/342-4105 FAX 605/342-4222

City of Rapid City May 17, 2012 Engineering Division

Attn: Mr. Gale Schipke 300 6th Street Rapid City, SD 57701

Re: 2012 City Wide Geotechnical, Construction Materials and QA/QC Services Project No. PW12-1998 CIP #50637, Cabelas Drive and Unmarked Street to Cambria Suites, Asphalt Pavement Section Verification, Rapid City, SD

Dear Mr. Schipke:

As requested, we have obtained core samples of the asphalt pavement and determined the pavement section at three locations on East Mall Drive in Rapid City, South Dakota. The core samples were taken on May 16, 2012, at the locations indicated by the City of Rapid City. The thickness of the asphalt and base course were measured for each location. Our findings are presented next.

- Core No. 1: <u>0 to 6.5"</u> HMA (3.2" Top Lift & 3.3" Bottom Lift) <u>6.5" to 12.5"</u> Base Course with a woven geotextile fabric below
- Core No. 2: <u>0 to 6.25"</u> (3.4" Top Lift & 2.85" Bottom Lift <u>6.25" to 15.5"</u> Base Course with a geotextile fabric below
- Core No. 3: 0 to 5 25" HMA (2.5" Top Lift & 2.75" Bottom Lift) CARELAS

 5.25" to 15.5" Base Course with a geotextile fabric below.

The core locations are presented on the attached map as Figure No. 1.

We trust this information is sufficient. If you have any questions or need anything additional, please don't hesitate to contact us. Thank you for the opportunity to be of continued service.

Sincerely,

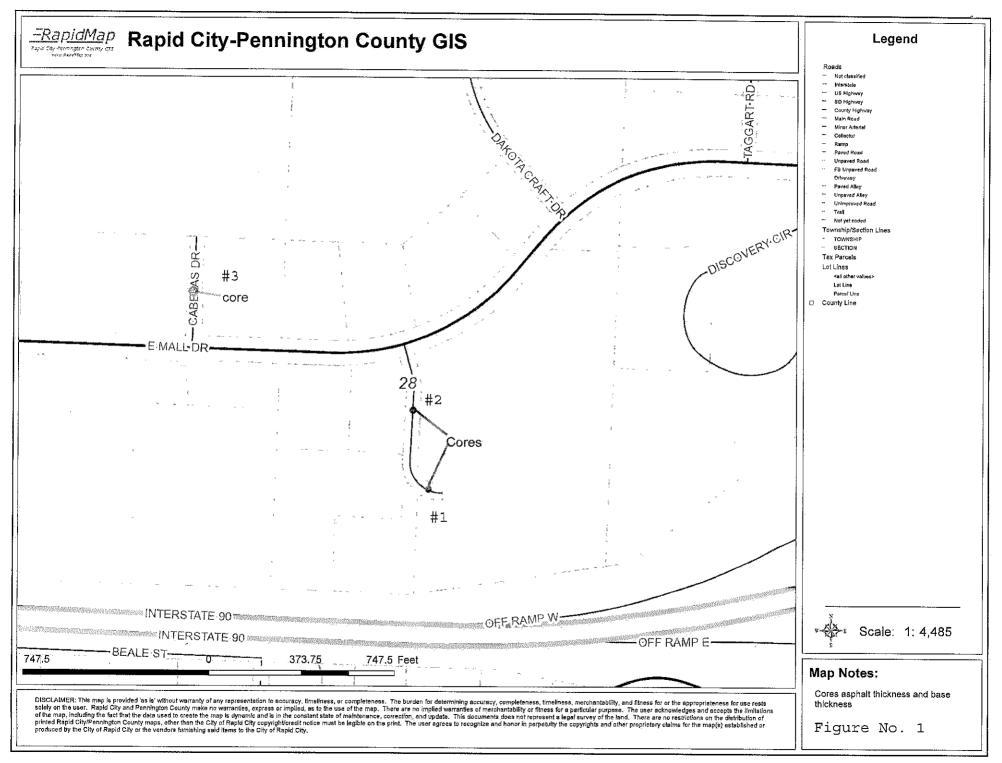
FMG, Inc.

Dever P. Larson, CPRR

FMG File # 110163.02

L:\Project\Geotech Reports\110163.02 Task 4 2012 CityWideGeotech\110163.03 Task 4 Cabelas Dr. HMA cores

C:





8105 Black Hawk Bd • PO Box 558 • Black Hawk; SD 57718 0558 • Phone (605) 787-9303 • FAX (605) 787-9515 140 Pine Needle Drive • Spearfish, SD 57783 • Phone (605) 642-2742 • Mobile 390-3768

SITE WORK SPECIALISTS, INC.

May 18, 2012

P.O. Box 7504

Rapid City, South Dakota 57709

Attn: Mr. Chris Stout

ATS No. 12-12228

Subj: Pavement Section Evaluation Cabela's Drive As-built Section

Rapid City, South Dakota

PROJECT INFORMATION AND BRIEF HISTORY

As requested, we are providing this pavement evaluation for the as-built pavement section of Cabela's Drive in Rapid City, South Dakota. We were to evaluate the as-built section versus the design section for the roadway pavement section.

PAVEMENT EVALUATION

Based on our review of the in-place asphalt concrete and aggregate base course thicknesses determined by FMG, Inc., on May 16, 2012, we understand the as-built pavement section consists of 5.25" of asphalt concrete pavement overlying 10.25" of aggregate base course. We also understand that geotextile fabric is present below the aggregate base. We understand the plan design section called for 6" inches of asphalt concrete over 8" of aggregate base.

We computed the granular equivalent (GE) of both sections as:

Design Section:

HMA Pavement - (6.00) X (2.00 GE factor) = 12.00

Agg. Base - (8,00) X (1.00 GE factor) = 8.00

Total Granular Equivalent = 20.00

As-built Section:

HMA Pavement - (5.25) X (2.00 GE factor) = 10.50

Agg. Base - (10.25) X (1.00 GE factor) = 10.25

Total Granular Equivalent = 20.75

SIOUX FALLS . BLACK HAWK . SPEARFISH

SITE WORK SPECIALISTS, INC. Pavement Section Evaluation Cabela's Drive As-built Section

May 18, 2012

Rapid City, South Dakota

Conclusions:

Based on the granular equivalence evaluation, the as-built section provides a higher strength number than the design section.

Closure:

If there are questions regarding this report, or you desire additional consultation, please call us at (605) 787-9303.

Sincerely,

American Technical Services, Inc.

DAVEG BRESSLER

BRESSLER

TH DAVOTA

Dave G. Bressler, P.E. Director of Engineering

Attachment: FMG Core Thicknesses

cc: File