

BOARD OF COUNTY COMMISSIONERS OF DOUGLAS COUNTY, KANSAS

WEDNESDAY, FEBRUARY 10, 2016

6:00 p.m.

CONSENT AGENDA

- (1) (a) Consider approval of Commission Orders;
- (b) Consider Purchase and Mailing of Annual Notice of Value (Steve Miles);
- (c) Consider authorizing Emergency Communications Director or approve 2016 Annual Service and Maintenance Agreement with Motorola Solutions (Randy Roberts);
- (d) Acknowledge reporting of State Forfeitures per K.S.A. 60-4117(d)(2) for Sheriff's office (Ken McGovern);
- (e) Consider approval to solicit bids for Herbicides Noxious Weed Cost Share Sale and Rights-of-Way Control (Keith Browning);
- (f) Consent Agenda approval to solicit bids for 2016 contract maintenance work: Project No. 2016-0 Chip Seal; Project No. 2016-05 Bituminous Frictional Sealing and Project No. 2016-06 Mill & Overlay (Keith Browning)
- (g) Consider awarding construction contract for Project No. 2013-20, replacement of Bridge No. 10.00N-16.38E, Route 458 bridge over Coal Creek (Keith Browning);
- (h) Consider awarding construction contract for Project No. 2013-18 deck replacement for Bridge No. 08.74N-07.95E, Route 1039 bridge over Washington Creek at Lone Star town (Keith Browning)

REGULAR AGENDA

- (2) **CUP-15-00613:** Consider a Conditional Use Permit for Calcio Village, an *Athletic Field* complex for youth soccer on approximately 80 acres, located at the intersection of E 1750 Rd & N 1300 Rd. Submitted by Jambars Futbol Club Inc, on behalf of John Pendleton for Lorita H Pendleton, Trustee, property owner of record. Mary Miller is the Planner.
- (3) Consider approving changes to the Personnel Policies (Sarah Plinsky)
- (4) (a) Consider approval of Accounts Payable (if necessary)
- (b) Appointments
 - Board of Construction Codes Appeals (1) position 12/15
 - Lawrence Douglas-County Health Board (1) position 03/16
 - Heritage Conservation Council (2) positions 05/16
- (c) Public Comment
- (d) Miscellaneous
- (5) Adjourn

WEDNESDAY, FEBRUARY 17, 2016

-Consider accessing cooperative contract for remodel of restroom in JLE Building (Jackie Waggoner)

WEDNESDAY, FEBRUARY 24, 2016

-Consider letter of support to KDOT for closure of the E 1200 Rd (Kasold) at-grade intersection with K-10 (Keith Browning)

WEDNESDAY, MARCH 2, 2016

WEDNESDAY, MARCH 9, 2016

WEDNESDAY, MARCH 16, 2016 – Light or cancelled

WEDNESDAY, MARCH 23, 2016

WEDNESDAY, MARCH 30, 2016

WEDNESDAY, APRIL 6, 2016

- Presentation of Champion for Child Abuse and Neglect Prevention Award (Diana Frederick)
- Proclamation for "Child Abuse Prevention Month" (Diana Frederick)

***Note:** The Douglas County Commission meets regularly on Wednesdays at 4:00 P.M. for administrative items and 6:00 P.M. for public items at the Douglas County Courthouse. Specific regular meeting dates that are not listed above have not been cancelled unless specifically noted on this schedule.*



DOUGLAS COUNTY ADMINISTRATIVE SERVICES

Division of Purchasing

1100 Massachusetts Street
Lawrence, KS 66044-3064
(785) 832-5286 Fax (785) 838-2480
www.douglas-county.com

MEMO TO: The Board of County Commissioners
Craig Weinaug, County Administrator

FROM: Jackie Waggoner, Purchasing Director
Division of Purchasing

SUBJECT: Consider Purchase & Mailing of Annual Notice of Value

DATE: February 4, 2016

Each year the Appraiser's Office distributes approximately 40,000 notice of value. This process requires printing a shell notice and then individualizing each notice through a data merge conversion, CASS certify, pre-sort, and printing envelopes.

In the past, our cost has been under \$7,500 which is a threshold that can be approved by the department head. We have used our contractor for mailing services, Stampede, for the mailing of these notices.

This year our supplier for the notices, KC Auto Mail, quote was for \$7,790.34. They also provided rates for postage if it were mailed through their office. We compared their rates to Stampede and determined there could be a savings of approximately \$3,000 to have KC Auto Mail handle the postage. Below are the rate comparisons:

	Quantity	KC Auto Mail	Stampede
1 st Class 1 oz. Mail	35,805	0.388/piece = \$13,892 5 digit sort	0.457/piece = \$18,368
	1,627	0.413/piece = \$ 672 3 digit sort	
	705	0.413/piece = \$ 291 AADC	
	1,670	0.436/piece = \$ 728 Mixed AADC	
	373	0.482/piece = \$ 180 NonAuto	
	13	1.20/piece = \$ 16 Foreign	
ESTIMATED MAILING COST	40,193	\$15,779	\$18,368

When you add the estimated mailing cost to the quote of \$7,790.34, we exceed the \$20,000 threshold that normally requires a formal bidding process or accessing a cooperative contract. This year we would like to take advantage of the postage cost savings through KC Auto Mail. Staff will look at all county mailings that meet the same criteria and look at establishing a multi-year contract that would be brought to you for approval.

The estimated volume could increase/decrease which may impact the mailing cost. For this reason, we are asking you to provide the Assistant County Administrator with the authority to approve change orders up to 5% of the total cost.

RECOMMENDATION: The Board of County Commissioners waives the formal bidding process and approves the purchase and mailing of the notice of value with KC Auto Mail in an amount of \$23,569.34, and authorizes the Assistant County Administrator to approve change orders up to 5% of that amount.

111 East 11th Street, Unit 200
Lawrence, KS 66044
phone: (785) 832-5237
fax: (785) 330-2801



RANDY L. ROBERTS
Director

email: eccdept@douglas-county.com
website: www.douglas-county.com

MEMORANDUM

To: Board of County Commissioners

From: Randy L. Roberts, Director

Re: Consent Agenda Item to approve annual service and maintenance contracts for DGCO Emergency Communications.

Date: February 4, 2016

Re: Consent Agenda item waiving formal bidding process and authorize staff to access the State of Kansas, Western States Contract Alliance, and related MARC (Mid America Regional Council) contracts for the renewal of the existing annual service agreement with Motorola Solutions, Inc. (contract #S00001019825) for portable two-way radios.

Motorola Solutions, Inc. (January 1, 2016-December 31, 2016) \$27,118.80

The funds for this service agreement are allocated in the E911 Tax Fund, and are not obligated through the General Fund as an operating cost. This is an annual service agreement covering the Portable two-way radios currently utilized by the Douglas County Agencies that communicate through the Douglas County Emergency Communications Center.

Action Required: Consent agenda authorization for Emergency Communications Director to approve this 2016 Service and Maintenance agreement.

911 ADVISORY BOARD

SHERIFF KENNETH MCGOVERN
Douglas County
Chairman

CHIEF MARK BRADFORD
Lawrence Douglas County
Fire-Medical Services
Vice Chairman

CHIEF TARIK KHATIB
Lawrence Police Department

CHIEF RALPH OLIVER
Kansas University
Public Safety

CHIEF KEN KEITER
Eudora City Fire Department

LAW ENFORCEMENT CENTER
111 E. 11TH STREET
LAWRENCE, KS 66044-2990
PHONE: (785) 841-0007
FAX: (785) 841-5168



CORRECTIONS FACILITY
3601 E. 25TH STREET
LAWRENCE, KS 66046-5616
PHONE: (785) 830-1000
FAX: (785) 830-1085

KENNETH M. MCGOVERN
SHERIFF

JAMES J. MARTIN, JR.
UNDERSHERIFF

GARY L. BUNTING
UNDERSHERIFF

MEMORANDUM

February 2, 2016

TO: The Board of County Commissioners
From: Kenneth M. McGovern, Sheriff
Ref: Reporting of *State* Forfeitures per K.S.A. 60-4117(d)(2)

This memorandum is to notify the Board of County Commissioners, per K.S.A. 60-4117(d)(2) that the Lawrence-Douglas County Drug Enforcement Unit (DEU) received the following *state forfeiture funds* in the year 2015.

<i>Date Deposited:</i>	<i>Case #:</i>	<i>Amount Awarded:</i>	<i>DEU's Share after all costs:</i>
01/23/2015	DU-14-000060	\$9,000.00	\$3,614.58
01/23/2015	DU-14-000050	\$2,624.00	\$1,862.39
02/02/2015	DU-14-000045	\$5,980.00	\$1,261.67
04/23/2015	DU-14-000060	\$8,768.00	\$2,716.85
09/08/2015	DU-14-000063	\$29,425.00	\$21,963.75
12/17/2015	DU-11-000036	\$5,500.00	\$4,400.00
	Total Awarded:	\$61,297.00	\$35,819.24

Total DEU Share after costs: \$35,819.24 + \$795.07 interest for **Grand Total DEU share:** \$36,614.31



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MEMORANDUM

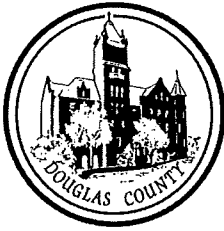
February 2, 2016

TO: The Board of County Commissioners
From: Kenneth M. McGovern, Sheriff
Ref: Reporting of *State* Forfeitures per K.S.A. 60-4117(d)(2)

This memorandum is to notify the Board of County Commissioners, per K.S.A. 60-4117(d)(2) that the Douglas County Sheriff's Office received the following *state forfeiture funds* in the year 2015.

<i>Date Deposited:</i>	<i>Case #:</i>	<i>Amount Awarded:</i>	<i>DGSO's Share after all costs:</i>
02/18/2015	D14-7984	\$11,006.00	\$8,875.75
	Total Awarded:	\$ 11,006.00	\$8,875.75

Total DGSO Share after costs: \$8,875.75 + \$4.43 interest for Grand Total: \$8,880.18



DOUGLAS COUNTY PUBLIC WORKS

3755 E. 25th Street
Lawrence, KS 66046
(785) 832-5293 Fax (785) 842-1201
dgcopubw@douglascountyks.org
www.douglascountyks.org

Keith A. Browning, P.E.
Director of Public Works/County Engineer

MEMORANDUM

To : Board of County Commissioners

From : Keith A. Browning, P.E., Director of Public Works/County Engineer *KB*

Date : February 4, 2016

Re : Consent Agenda Approval to Solicit Bids for Herbicides
Noxious Weed Cost Share Sales and Rights-of-Way Control

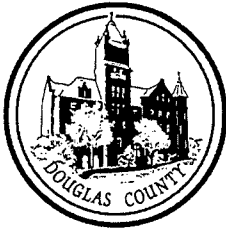
The Public Works Department requests approval to solicit bids for the supply of herbicides for the control of noxious weeds in Douglas County.

It is our intent to purchase 252 gallons of Picloram 22K, 900 gallons of 2,4-D 4 lb. Amine, 400 gallons of Glyphosate, 300 gallons of Pasture Guard HL, and 320 ounces of Escort XP, all for initial inventory balances.

All chemicals are on the State "Approved Herbicide" list. Funds in the amount of \$125,160 were budgeted and approved for these herbicides.

We plan to open bids in March 2016. Contracts will be presented to the BOCC for approval thereafter.

Action Required: Consent Agenda approval to solicit bids for supply of herbicides as required for the 2016 spray season.



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Keith A. Browning, P.E.
Director of Public Works/County Engineer

MEMORANDUM

To : Board of County Commissioners

From : Keith A. Browning, P.E., Director of Public Works/County Engineer *KAB*

Date : February 4, 2016

Re : Consent Agenda approval to solicit bids for 2016 contract maintenance work
Project No. 2016-01; Chip Seal
Project No. 2016-05; Bituminous Frictional Sealing
Project No. 2016-06; Mill & Overlay

In accordance with the Purchasing Policy, we request approval to solicit bids for three separate contract maintenance projects in 2016. Following the bid openings, contracts will be presented to the BOCC for approval.

This department anticipates a need to chip seal 42.3 centerline road miles by contract in 2016. This includes 2.6 miles of roads within the City of Lecompton, for which the cost will be reimbursed by the City of Lecompton. The exact lengths and locations of roads to be chip sealed this year will be determined following inspection in the spring. We want to solicit bids now because the supply of the lightweight aggregate ("chips") is limited, and we want to ensure availability later this summer when the work will occur.

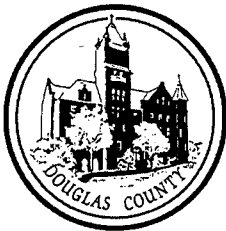
The "bituminous frictional seal" is a type of slurry seal that is typically used for lower volume, lower speed roads. Loose aggregate, or "chips", are not applied and rolled into the bituminous material, as in chip seals. Rather, a finer aggregate is incorporated into the bitumen and applied in one process. We plan to use this for 2.02 miles of rural subdivision roads.

We currently anticipate a need to mill and overlay approximately 1.6 miles of county routes this summer. The exact lengths and locations of roads to be overlaid this year will be determined following inspection in the spring.

Road & Bridge Fund 201 includes \$1,312,500 for road maintenance contracts, and the CIP includes \$500,000 for annual contract maintenance projects. Douglas County contract maintenance costs are currently estimated as follows:

Project No. & Description	Estimated Cost
2016-01; Chip Seal	\$1,300,000
2016-05; Bituminous Frictional Sealing	\$ 46,600
2016-06; Mill & Overlay	\$ 370,000
TOTAL	\$1,716,600

Action Required: Consent Agenda approval to solicit bids for the following contract maintenance projects in 2016: Project No. 2016-01, Chip Seals; Project No. 2016-05, Bituminous Frictional Sealing; Project No. 2016-06, Mill and Overlays.



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Keith A. Browning, P.E.
Director of Public Works/County Engineer

MEMORANDUM

To: Board of County Commissioners

From: Chad Voigt, P.E., Deputy Public Works Director *CV*

Date: February 5, 2016

Re: Consider awarding construction contract for Project No. 2013-20
Replacement of Bridge No. 10.00N-16.38E
Route 458 bridge over Coal Creek

We opened bids on January 29th, 2016 for construction of the referenced project. The bid tabulation is attached and summarized as follows:

Engineer's Estimate	\$816,600.80
Bryan-Ohlmeier Construction	\$794,978.40
Crossland Heavy Contractors	\$979,979.00

We recommend the BOCC award a construction contract to the low bidder, Bryan-Ohlmeier Construction. We also request authorization to approve construction change orders totaling up to 5% of the total contract amount.

The referenced bridge carries Route 458 (N 1000 Road) over Coal Creek approximately 0.38 miles east of Route 1055. The existing bridge is a 60 feet span, concrete rigid frame bridge constructed in 1937 with a sufficiency rating of 54.6. The bridge is narrow (24' roadway width), and has relatively low waterway capacity with occasional (on average, every 3-10 years) overtopping. The replacement bridge will be a three-span concrete haunched-slab bridge with an overall length of approximately 102 feet. It will have a 36' roadway width, which provides for 6'-wide shoulders. It provides significantly increased waterway capacity, and will pass the 50-year flow with no overtopping. We plan for construction to begin in May 2016. The current CIP allocates \$986,000 to cover all costs associated with this project.

Action required: Approval of a construction contract in the low-bid amount of \$794,978.40 with Bryan-Ohlmeier Construction for Project 2013-20, replacement of Bridge No. 10.00N-16.38E, and authorization for the Public Works Director to approve change orders totaling up to 5% of the total contract amount.

DOUGLAS COUNTY PUBLIC WORKS
PROJECT 2013-20/BID NO. 16-F-0002
DESCRIPTION: BRIDGE REPLACEMENT FOR 10.00N-16.38E
BID TABULATION

ITEM NO.	BID ITEM	UNIT	QTY	ENGINEER'S ESTIMATE		Bryan-Ohlmeier Constr.		Crossland Heavy Contractors			
				UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
1	CONTRACT CONSTRUCTION STAKING	L.S.	1	\$10,000.00	\$10,000.00	\$5,750.00	\$5,750.00	\$6,500.00	\$6,500.00		
2	FIELD OFFICE & LABOATORY (TYPE C)	EA.	1	\$6,200.00	\$6,200.00	\$1,000.00	\$1,000.00	\$3,500.00	\$3,500.00		
3	MOBILIZATION	L.S.	1	\$30,000.00	\$30,000.00	\$29,500.00	\$29,500.00	\$25,000.00	\$25,000.00		
4	REMOVAL OF EXISTING STRUCTURES	L.S.	1	\$25,000.00	\$25,000.00	\$17,500.00	\$17,500.00	\$42,137.80	\$42,137.80		
5	CLEARING & GRUBBING	L.S.	1	\$10,000.00	\$10,000.00	\$1,050.00	\$1,050.00	\$2,500.00	\$2,500.00		
6	COMMON EXCAVATION	C.Y.	3,038	\$10.00	\$30,380.00	\$12.25	\$37,215.50	\$10.50	\$31,899.00		
7	ROCK EXCAVATION	C.Y.	247	\$14.00	\$3,458.00	\$31.50	\$7,780.50	\$40.00	\$9,880.00		
8	COMPACTION OF EARTHWORK(TYPE AA) (MR-5-5)	C.Y.	1,302	\$3.00	\$3,906.00	\$1.60	\$2,083.20	\$4.50	\$5,859.00		
9	WATER (GRADING) (SET)	Mgal	1	\$35.00	\$35.00	\$35.00	\$35.00	\$35.00	\$35.00		
10	CONCETE PAVEMENT (6" UNIFORM) (AE)	S.Y.	207	\$52.00	\$10,764.00	\$50.00	\$10,350.00	\$140.00	\$28,980.00		
11	CONCRETE PAVEMENT (10" UNIFORM) (AE)	S.Y.	107	\$200.00	\$21,400.00	\$180.00	\$19,260.00	\$180.00	\$19,260.00		
12	AGGREGATE BASE (AB-3) (4")	S.Y.	163	\$8.00	\$1,304.00	\$10.00	\$1,630.00	\$6.00	\$978.00		
13	REINFORCED CONCRETE BOX (12'x7') (PRECAST)	L.S.	1	\$62,000.00	\$62,000.00	\$78,750.00	\$78,750.00	\$80,000.00	\$80,000.00		
14	END SECTION (24") (RC)	EA.	2	\$780.00	\$1,560.00	\$1,250.00	\$2,500.00	\$800.00	\$1,600.00		
15	END SECTION (24") (CMP)	EA.	2	\$450.00	\$900.00	\$550.00	\$1,100.00	\$890.00	\$1,780.00		
16	CROSS ROAD PIPE (24") (RCP)	L.F.	66	\$65.00	\$4,290.00	\$54.00	\$3,564.00	\$55.00	\$3,630.00		
17	ENTRANCE PIPE (24") (CMP)	L.F.	32	\$53.00	\$1,696.00	\$42.50	\$1,360.00	\$53.00	\$1,696.00		
18	ENTRANCE PIPE (54") (CMP)	L.F.	112	\$95.00	\$10,640.00	\$112.00	\$12,544.00	\$85.00	\$9,520.00		
19	STEEL PLATE GUARDRAIL	L.F.	337.5	\$52.00	\$17,550.00	\$43.00	\$14,512.50	\$53.00	\$17,887.50		
20	GUARDAIL END TERMINAL (SKT)	EA.	3	\$2,500.00	\$7,500.00	\$2,200.00	\$6,600.00	\$2,950.00	\$8,850.00		
21	SIGNING OBJECT MARKER (TYPE 3)	EA.	8	\$70.00	\$560.00	\$150.00	\$1,200.00	\$200.00	\$1,600.00		
22	CONCRETE (GRADE 4.0)	C.Y.	6.2	\$850.00	\$5,270.00	\$725.00	\$4,495.00	\$950.00	\$5,890.00		
23	CONCRETE (GRADE 4.0) (AE)	C.Y.	1.6	\$700.00	\$1,120.00	\$900.00	\$1,440.00	\$1,350.00	\$2,160.00		
24	BRIDGE BACKWALL PROTECTION SYSTEM	S.Y.	10	\$36.00	\$360.00	\$35.00	\$350.00	\$40.00	\$400.00		
25	REINFORCING STEEL (GRADE 60)	LBS.	430	\$0.95	\$408.50	\$1.15	\$494.50	\$1.90	\$817.00		
26	REINFORCING STEEL (GR 60) (EPOXY COATED)	LBS.	550	\$1.30	\$715.00	\$1.25	\$687.50	\$1.20	\$660.00		
27	FOUNDATION STABILIZATION	C.Y.	4	\$45.00	\$180.00	\$60.00	\$240.00	\$70.00	\$280.00		
28	CONCRETE FOR SEAL COURSE (SET)	C.Y.	1	\$175.00	\$175.00	\$175.00	\$175.00	\$175.00	\$175.00		
29	GRANULAR BACKFULL (WINGWALLS) (SET)	C.Y.	1	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00		
30	MAILBOX INSTALLATION (SET)	EA.	1	\$140.00	\$140.00	\$140.00	\$140.00	\$140.00	\$140.00		
31	EXCAVATION (CLASS 1)	C.Y.	120	\$34.00	\$4,080.00	\$30.00	\$3,600.00	\$23.00	\$2,760.00		

DOUGLAS COUNTY PUBLIC WORKS
PROJECT 2013-20/BID NO. 16-F-0002
DESCRIPTION: BRIDGE REPLACEMENT FOR 10.00N-16.38E
BID TABULATION (Page Two)

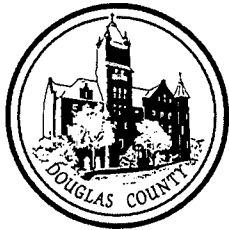
ITEM NO.	BID ITEM	UNIT	QTY	ENGINEER'S ESTIMATE		Bryan-Ohlmeier Constr.		Crossland Heavy Contractors			
				UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
32	EXCAVATION (CLASS 2)	C.Y.	206	\$92.00	\$18,952.00	\$85.00	\$17,510.00	\$85.00	\$17,510.00		
33	CONCRETE (GRADE 4.0) (AE)	C.Y.	106.8	\$721.00	\$77,002.80	\$575.00	\$61,410.00	\$850.00	\$90,780.00		
34	CONCRETE (GRADE 4.0) (SA)	C.Y.	268.4	\$684.00	\$183,585.60	\$685.00	\$183,854.00	\$890.00	\$238,876.00		
35	REINFORCING STEEL (GRADE 60) (EPOXY COATED)	LBS	67,470	\$1.21	\$81,638.70	\$1.00	\$67,470.00	\$1.15	\$77,590.50		
36	REINFORCING STEEL (GRADE 60)	LBS	3,800	\$1.14	\$4,332.00	\$1.05	\$3,990.00	\$1.15	\$4,370.00		
37	STEEL PILES (HP 10x42)	L.F.	1,436	\$41.50	\$59,594.00	\$40.00	\$57,440.00	\$65.00	\$93,340.00		
38	ABUTMENT AGGREGATE DRAIN	C.Y.	30	\$365.00	\$10,950.00	\$337.00	\$10,110.00	\$330.00	\$9,900.00		
39	BRIDGE BACKWALL PROTECTION SYSTEM	S.Y.	48	\$35.00	\$1,680.00	\$30.00	\$1,440.00	\$40.00	\$1,920.00		
40	SLOPE PROTECTION (RIP RAP STONE)	C.Y.	730	\$53.25	\$38,872.50	\$65.00	\$47,450.00	\$65.00	\$47,450.00		
41	SWPPP DESIGN	L.S.	1	\$3,500.00	\$3,500.00	\$2,500.00	\$2,500.00	\$2,000.00	\$2,000.00		
42	SWPPP INSPECTION	EA.	6	\$500.00	\$3,000.00	\$250.00	\$1,500.00	\$430.00	\$2,580.00		
43	TEMPORARY SEEDING	L.S.	1	\$500.00	\$500.00	\$3,300.00	\$3,300.00	\$1,500.00	\$1,500.00		
44	SILT FENCE	L.F.	240	\$3.50	\$840.00	\$5.00	\$1,200.00	\$2.30	\$552.00		
45	BIODEGRADABLE LOG (20")	L.F.	240	\$10.00	\$2,400.00	\$11.00	\$2,640.00	\$6.00	\$1,440.00		
46	SEDIMENT REMOVAL (SET)	C.Y.	1	\$35.00	\$35.00	\$35.00	\$35.00	\$35.00	\$35.00		
47	TEMPORARY BERM (SET)	L.F.	1	\$1.20	\$1.20	\$1.20	\$1.20	\$1.20	\$1.20		
48	WATER (EROSION CONTROL) (SET)	Mgal	1	\$35.00	\$35.00	\$35.00	\$35.00	\$35.00	\$35.00		
49	SEEDING (PERMANENT)	L.S.	1	\$3,000.00	\$3,000.00	\$3,650.00	\$3,650.00	\$2,800.00	\$2,800.00		
50	HMA COMMERCIAL GRADE (CLASS A) (SURFACE)	TON	95	\$73.00	\$6,935.00	\$88.00	\$8,360.00	\$100.00	\$9,500.00		
51	HMA COMMERCIAL GRADE (CLASS A) (BASE)	TON	379	\$60.00	\$22,740.00	\$88.00	\$33,352.00	\$100.00	\$37,900.00		
52	AGGRAGATE BASE (AB-3) (8")	S.Y.	871	\$8.00	\$6,968.00	\$9.00	\$7,839.00	\$10.00	\$8,710.00		
53	WATER (AGGREGATE BASE) (SET)	Mgal	1	\$35.00	\$35.00	\$35.00	\$35.00	\$35.00	\$35.00		
54	SURFACING MATERIAL (AB-3)	TON	85	\$20.00	\$1,700.00	\$20.00	\$1,700.00	\$23.00	\$1,955.00		
55	WORK ZONE SIGNS (0 TO 9.25 S.F.)	EADA	10,350	\$0.25	\$2,587.50	\$0.11	\$1,138.50	\$0.10	\$1,035.00		
56	WORK ZONE SIGNS (9.25 TO 16.25 S.F.)	EADA	1,050	\$0.25	\$262.50	\$1.05	\$1,102.50	\$1.20	\$1,260.00		
57	WORK ZONE BARRICADES (TYPE III-4'-12')	EADA	1,950	\$1.25	\$2,437.50	\$1.05	\$2,047.50	\$1.20	\$2,340.00		
58	WORK ZONE WARNING LIGHT (TYPE "A" LOW INTESITY)	EADA	4,500	\$0.25	\$1,125.00	\$0.01	\$45.00	\$0.10	\$450.00		
59	PORTABLE CHANGEABLE MESSAGE SIGN	EA.	14	\$375.00	\$5,250.00	\$78.00	\$1,092.00	\$85.00	\$1,190.00		
60	TRAFFIC CONTROL (INITIAL SET UP)	L.S.	1	\$5,000.00	\$5,000.00	\$5,775.00	\$5,775.00	\$6,500.00	\$6,500.00		
TOTAL BID -					\$816,600.80		\$794,978.40		\$979,979.00		

ADDENDUM NO. 1 -

Keith A. Browning, PE, Director of Public Works

Date

Jaime Shew, Douglas County Clerk



DOUGLAS COUNTY PUBLIC WORKS

3755 E. 25th Street
Lawrence, KS 66046
(785) 832-5293 Fax (785) 842-1201
dgcopubw@douglascountyks.org
www.douglascountyks.org

Keith A. Browning, P.E.

January 29, 2016

BID DOCUMENTS

FOR

DOUGLAS COUNTY, KANSAS

BID NO. 16-F-0002
PROJECT NO. 2013-20

ADDENDUM NO. 1

This addendum is issued to verify that the above named Bid Documents are modified and/or supplemented, as noted herein, and is, from the above date an integral part of the Bid Documents.

Bridge Deck Grooving

The bridge deck grooving for this project will be completed by hand tining when finishing the freshly poured deck. There will not be a separate line item for pay. Work to complete this shall be subsidiary to other items.

The Contractor shall hereby acknowledge receipt of the above referenced addendum on the Proposal (P-1) page of the original set of contract documents prior to submittal.

Keith A. Browning, P.E.
Director of Public Works

8

DOUGLAS COUNTY, KANSAS
OFFICE OF THE COUNTY ENGINEER
SPECIFICATIONS AND CONTRACT DOCUMENTS
FOR
DOUGLAS COUNTY PROJECT NO. 2013-20
Bridge No. 10.00N-16.38E REPLACEMENT

BID #16-F-0002

Douglas County Commissioners

James E. Flory, Chairman

Mike Gaughan, Member

Nancy Thellman, Member

Approved By:

Keith A. Browning, P.E.
Director of Public Works
and County Engineer

Date: 1/6/2016

DOUGLAS COUNTY, KANSAS
PROJECT NO. 2013-20
BID #16-F-0002

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<http://www.ksdot.org/burConsMain/specprov/2007SSDefault.asp>
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DOUGLAS COUNTY, KANSAS
PROJECT NO. 2013-20
BID #16-F-0002
NOTICE TO CONTRACTORS

Notice is hereby given that sealed proposals for the performance of the contract above noted will be received in the Office of the Douglas County Clerk until 3:15 P.M., Friday, January 29, 2016, and then publicly opened in the Courthouse, 1100 Massachusetts Street, Lawrence, Kansas.

Douglas County Project No. 2013-20 consists of removing a 67' Reinforced Concrete Frame Bridge, Grading, construction of a 30'-40'-30' R.C. Haunch Slab (RCSH) Bridge, Pile Driving, Pre-Cast RCB, RCB extension, RCP, Asphalt approach transitions, and Traffic Control.

Project No. 2013-20 is located on Rte 458 approximately 6 miles SW of Lawrence, KS.

All bids must be submitted on forms obtainable at the Office of the Director of Public Works/County Engineer, 3755 E 25th St, Lawrence, KS 66046 or Demand Star @ www.demandstar.com, and are open for public inspection. Proposals shall be submitted in sealed envelopes, addressed to the Office of the County Clerk, Courthouse, 1100 Massachusetts, Lawrence, Kansas 66044, upon which is clearly written or printed "Proposal for Douglas County Project No. 2013-20", and the name and address of the bidder. Any bids received after the closing time will be returned unopened.

Copies of the Contract Documents and Specifications are available from the Office of the Director of Public Works and County Engineer of Douglas County, Kansas. Plans and contract documents s are available for purchasing. One half-sized set of plans and a copy of the contract documents and specifications; Cost \$50.00. The contract documents, specifications, and plans become the property of the prospective bidder and are not returnable. Copies of the contract documents, specifications, and plans are on file and open for public inspection at the Office of the County Engineer.

All bids must be accompanied by a CERTIFIED CHECK, CASHIER'S CHECK or a BID BOND for not less than Five Percent (5%) of the base bid as a guarantee that if awarded the Contract, the bidder will enter into a Contract and give bond as required. Said check or bond shall be made payable to the Board of County Commissioners, Douglas County, Kansas.

Contracts will be awarded only to such bidders as are on the list of Pre-Qualified Contractors for the Kansas Department of Transportation on the date established for receiving and opening of bids.

The Board of County Commissioners of Douglas County, Kansas reserve the right to reject any or all bids and to waive technicalities, and to award the contract to the bidder that the Commission deems best suited to accomplish the work.

DOUGLAS COUNTY PUBLIC WORKS
Keith A. Browning, P.E.
Director of Public Works
Date: 1/6/2016

Publication Date: Friday January 8, 2016
Saturday January 16, 2016

cc: Lawrence Journal World
Douglas County Commission
Public Works Accounting
Douglas County Clerk

Douglas County Administrator
Douglas County Purchasing
Douglas County Shop

DOUGLAS COUNTY, KANSAS
PROJECT NO. 2013-20
BID #16-F-0002

INFORMATION FOR BIDDERS

1. Proposals must be submitted on duly executed copy of the Proposal Forms obtained at the Office of the Director of Public Works, 3755 E 25th St, Lawrence, KS 66046 or Demand Star.
2. Proposals must be in sealed envelopes, addressed to the Office of the County Clerk, Courthouse, Lawrence, Kansas, upon which is clearly written, or printed, "Proposal for Douglas County Project No. 2013-20" and the name and address of the bidder.
3. Each bidder shall state in his Proposal, his name, place of residence and his exact post office address, and the names and addresses of all persons or parties interested with him therein. Anyone signing a Proposal as an agent for another must file, with the Proposal, acceptable evidence of his authority to do so.
4. Each bidder is required to deposit with his Proposal a Certified Check, Cashier's Check or Bid Bond in the amount of five percent (5%) of the base bid. The above required deposit will serve as a guarantee that the bidder will file all bonds required and enter into the Contract, should it be awarded to him, according to the terms of his bid, within twenty-one (21) days after the certification of the award. Should the Contractor fail to file approved surety bonds or enter into Contract with Douglas County, Kansas, the bid security shall be forfeited as liquidated damages, and the money realized therefrom turned into the County Treasury.
5. Contracts will be let only to such bidders as are on the list of Pre-Qualified Contractors for the Kansas Department of Transportation on the date established for receiving and opening of bids.
6. Bidders must show their unit prices, make extensions based on the unit price bid for each item and total the bid for all items.
7. In the event any discrepancy occurs between the unit prices and the gross sum bid, the unit price shall apply.
8. Proposals must be signed.
9. Failure to comply with one or all of the above stated requirements will be considered sufficient grounds for rejection of the Proposal.
10. The winning bidder shall, within twenty-one (21) days of the Award of the Contract, file an approved Statutory Bond and an approved Performance and Maintenance Bond in an amount equal to the total bid.

DOUGLAS COUNTY, KANSAS
PROJECT NO. 2013-20
BID #16-F-0002

SPECIFICATIONS

THE STANDARD SPECIFICATIONS FOR STATE ROAD AND BRIDGE CONSTRUCTION OF THE KANSAS DEPARTMENT OF TRANSPORTATION, EDITION OF 2007, shall be the Specifications for this Contract except the Sections and Articles which shall be deleted from the STANDARD SPECIFICATIONS and shall be revised as hereinafter shown.

DIVISION 100

GENERAL CLAUSES AND COVENANTS

Section 101.3

DEFINITIONS

BID BOND – DELETE item and ADD – The approved form of security, executed by the bidder and his surety or sureties, guaranteeing the execution of a satisfactory contract and the filing of an acceptable contract bond if the bidder's offer is accepted. The bid bond shall be a Certified Check, Cashier's Check or Bid Bond in the amount of five percent (5%) of the base bid. Said check or bond shall be made payable to the Board of County Commissioners, Douglas County, Kansas.

CONTRACT - DELETE item and ADD - The written agreement between the Board of County Commissioners of Douglas County, Kansas, and the Contractor setting forth the obligations of the parties thereunder, including, but not limited to, the performance of the work, the furnishing of labor and materials, and the basis of payment.

The Contract shall include the Contract Documents, which shall include the Proposal, Plans, Specifications, Contract Drawings, Supplemental Specifications, Special Provisions, Contract, Performance and Maintenance Bond, and the Statutory Bond, and also any change orders and agreements that are required to complete the construction of the work in an acceptable manner, including authorized extensions thereof, all of which constitute one instrument.

CONTRACT BOND - DELETE item and ADD - The Statutory Bond and the Performance and Maintenance Bond executed by the Contractor and his Surety, guaranteeing execution of the Contract and all Supplemental Agreements pertaining thereto and the payment of all legal debts pertaining to the construction of the Project.

DEPARTMENT - ADD - Douglas County, Kansas, represented by its Board of County Commissioners.

ENGINEER - DELETE item and ADD - Douglas County, Kansas, or the Director of Public Works of Douglas County, Kansas, acting directly or through his authorized representatives on behalf of Douglas County, Kansas.

LABORATORY - ADD - The testing laboratory designated by the Engineer.

SPECIFICATIONS (Continued)

RETAINAGE – ADD – From the grand total of the work completed as estimated by the Engineer, there shall be deducted five (5) percent to be retained by the County as required by KSA 68-1120 until full and satisfactory completion of the Contract, Specifications and Contract Documents and the Engineer shall certify the balance to the Commission for payment; except that no amount less than Five Hundred Dollars (\$500.00) will be paid unless the total amount of the Contract remaining unpaid is less than Five Hundred Dollars (\$500.00).

SECRETARY - DELETE item and ADD - COUNTY - Douglas County, Kansas, represented by its Board of County Commissioners.

STATE - DELETE item and ADD - COUNTY - Douglas County, Kansas represented by its Board of County Commissioners.

Section 102

BIDDING REQUIREMENTS AND CONDITIONS

102.1 CONSTRUCTION BULLETIN (ADVERTISEMENT), DELETE item and ADD – Douglas County will publish a Notice to Contractor's to notify prospective Contractors of a letting. This notice describes the contemplated work, informs the Contractor how to obtain Bidding Proposal Forms, identifies the location of plans and specifications, identifies the time and place for receiving bids, and reserves Douglas County's right to reject bids. All proposal blanks shall be obtained by prequalified bidders from the Office of the Director of Public Works of Douglas County, 3755 E 25th St, Lawrence, KS 66046. Proposal forms will be issued up to, but not after the close of business on the day preceding the opening of bids.

102.2(a) Prequalification Requirements. - DELETE the first sentence beginning with "Before...." and ending with "....work" and ADD - Bidders shall be prequalified for the type and magnitude of work covered by this Contract with the Kansas Department of Transportation as of the date established for receiving and opening of bids and shall give signed permission, if requested by the Engineer, to Douglas County, Kansas, to obtain the bidder's qualification from the Kansas Department of Transportation. Bidders will be classified under one or more of the following classifications:

102.11 BID BONDS - DELETE item and ADD - No Proposal will be accepted unless accompanied by a certified check, cashier's check or a bid bond in the amount of five percent (5%) of the base bid and made payable to the Board of County Commissioners, Douglas County, Kansas. The full amount of the proposed guaranty shall be forfeited to the County in liquidation of damages sustained in the event the bidder (or bidders) fail to execute a satisfactory Contract and file Contract Bonds within twenty-one (21) days after the notice of the award of Contract.

The Guarantees of the two (2) lowest responsible bidders shall remain in full force until such time as the execution of a Contract has been completed by the successful bidder and satisfactory Contract Bonds have been furnished. The Guarantees will be returned after the above has been accomplished.

SPECIFICATIONS (Continued)

102.12 SUBMITTING PROPOSALS - DELETE item and ADD - Each Proposal must be submitted on forms obtainable at the Office of the Director of Public Works, 3755 E 25th St, Lawrence, KS 66046, and must be submitted in sealed envelopes, addressed to the Office of the County Clerk, Courthouse, Lawrence, Kansas, upon which is clearly written or printed "Proposal for Douglas County Project No. 2013-20", and the name and address of the bidder. When a Proposal is sent by mail, the above mentioned envelope shall be enclosed in another envelope addressed to the County Clerk, Courthouse, Lawrence, Kansas. All Proposals shall be filed prior to the time and at the place specified in the Notice to Contractors. Proposals received after the stated time for filing will be returned to the bidders unopened. Faxed bids will not be accepted. Douglas County is not responsible for lost or misdirected bids, whether lost or misdirected by the postal or courier service of the bidder or the Douglas County mail room.

102.13 WITHDRAWING PROPOSALS BEFORE THE LETTING - DELETE item and ADD - A Proposal may be withdrawn after it has been delivered to the Office of the County Clerk, Courthouse, Lawrence, Kansas, by a letter or by written request of the bidder or his authorized representative in person, provided the request is in the hands of the County Clerk or Board of County Commissioners before the stipulated time for the opening of the Proposals.

102.14 REVISING PROPOSALS – DELETE item and ADD -A withdrawn Proposal may be corrected or altered in person by the bidder or his authorized representative and resubmitted before the stipulated time for opening of the Proposals.

Proposals cannot be altered or corrected by wire or letter.

Section 103

AWARD AND EXECUTION OF CONTRACT

103.3 CONTRACT BOND REQUIREMENTS - DELETE item and ADD - The successful bidder before entering into a Contract and within twenty-one (21) days after notice of the award of the Contract, shall execute a Statutory Bond and a Performance and Maintenance Bond in the form prescribed by the County and in the penal sum of the amount of the Contract, with a Surety to be approved by the County. The Statutory Bond and the Performance and Maintenance Bond shall be conditioned upon the faithful performance of the Contract and the payment of all indebtedness incurred for all labor, materials and supplies furnished therefore. The Bonds must be kept in full force for the time required by law and, if longer, during the applicable warranty periods. In the event the Surety or Bonding Company fails or becomes financially insolvent, then the Contractor shall, within five (5) business days of such failure or insolvency, file new and sufficient bonds in the amount designated by the County.

103.4 (a) EXECUTING THE CONTRACT - DELETE this section and ADD - The successful bidder shall furnish satisfactory Bonds, certificate(s) of insurance, and sign the contract within twenty-one (21) days after notice of the award of Contract.

SPECIFICATIONS (Continued)

103.5 FAILING TO EXECUTE THE CONTRACT - DELETE item and ADD - The failure of the successful bidder to execute a Contract and file Contract Bonds within twenty-one (21) days from the date of the notice of the award shall, at the option of the County, be just cause for the annulment of the award and for the forfeiture of the proposal guaranty to the County, not as a penalty but in liquidation damages sustained through delay.

In the event that the County opts to annul the award, the Contract may be reawarded to the next lowest responsible bidder, or Proposals may again be received at some later date.

Section 109

MEASUREMENT AND PAYMENT

109.2 SCOPE OF PAYMENT – ADD the following paragraph 109.2(f)RETAINAGE –: From the grand total of the work completed as estimated by the Engineer, there shall be deducted five (5) percent to be retained by the County as required by KSA 68-1120 until full and satisfactory completion of the Contract, Specifications and Contract Documents and the Engineer shall certify the balance to the Commission for payment; except that no amount less than Five Hundred (\$500.00) will be paid unless the total amount of the Contract remaining unpaid is less than Five Hundred Dollars (\$500.00).

109.5 PROGRESS PAYMENTS, DELETE the last sentence of subsection 109.5(a) “Work Accomplished” and replace with the following – “The Engineer may withhold from progress payments, liquidated damages, reimbursement for remedial work under subsection 105.5f., excess costs for breach of contract, final cleanup work expenses, five (5) percent contract retainage as required by KSA 68-1120, and other deducts the Contract Documents specify.

DOUGLAS COUNTY, KANSAS
PROJECT NO. 2013-20
BID #16-F-0002
PROPOSAL

TO THE BOARD OF COUNTY COMMISSIONERS OF
DOUGLAS COUNTY, KANSAS
COURTHOUSE
LAWRENCE, KANSAS 66044

1. Proposal of Bryan-Ohlmeier Construction Co., Inc. for the performance of "Douglas County Project No. 2013-20", in Douglas County, Kansas, by the construction of the work as described in the specifications and contract documents for the above mentioned project as set forth in the "Schedule of Prices".
2. The undersigned agrees to execute a contract for the proposed work within twenty-one (21) days after notice of the award of the Contract and to complete the work, if the proposal is accepted, as stated in Special Provision 07-DG-201. The earliest anticipated date for the "Notice to Proceed" is March 23, 2015.
3. In conformity with Article 108.8 of the Specifications, the liquidated damages for this Contract shall be as stated in TABLE OF LIQUIDATED DAMAGES.
4. In submitting this bid, the undersigned declares that he is the only person interested in said bid; that is made without any connection with any person or persons making another bid for the same Contract; that is in all respects fair and without collusion, fraud or misrepresentation.
5. The undersigned further declares that he has carefully examined the specifications, form of contract, and special provisions, and that he has inspected the actual location of the work, together with the local sources of supplies, and has satisfied himself as to all quantities and conditions, and understands that in signing this proposal he waives all right to plead any misunderstanding regarding the same.
6. The undersigned acknowledges receipt of the following Addenda:

Addendum No.

Dated

1

1/29/2016

Bryan-Ohlmeier Construction Co., Inc.
Name of Organization

By:

Cory Ohlmeier (President)

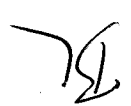
DOUGLAS COUNTY, KANSAS
PROJECT NO. 2013-20
BID #16-F-0002

SCHEDULE OF PRICES

<u>LINE ITEM NO.</u>	<u>COMMON ITEMS</u>	<u>UNIT</u>	<u>QUANTITY</u>	<u>UNIT COST</u>	<u>AMOUNT</u>
1	CONTRACTOR CONSTRUCTION STAKING	L.S.	1	5,750	5,750
2	FIELD OFFICE & LABORATORY (TYPE C)	EA.	1	1,000	1,000
3	MOBILIZATION	L.S.	1	29,500	29,500
4	REMOVAL OF EXISTING STRUCTURES	L.S.	1	17,500	17,500
	<u>ROAD ITEMS</u>				
5	CLEARING & GRUBBING	L.S.	1	1,050	1,050
6	COMMON EXCAVATION	C.Y.	3,038	12.25	37,215.50
7	ROCK EXCAVATION	C.Y.	247	31.50	7,780.50
8	COMPACTION OF EARTHWORK (TYPE AA) (MR-5-5)	C.Y.	1,302	1.60	2,083.20
9	WATER (GRADING) (SET)	MGAL	1	\$35.00	\$35.00
10	CONCRETE PAVEMENT (6" UNIFORM) (AE)	S.Y.	207	50	10,350
11	CONCRETE PAVEMENT (10" UNIFORM) (AE)	S.Y.	107	180	19,260
12	AGGREGATE BASE (AB-3) (4")	S.Y.	163	10	1,630
13	REINFORCED CONCRETE BOX (12'x7') (PRECAST)	L.S.	1	78,750	78,750
14	END SECTION (24") (RC)	EA.	2	1,250	2,500
15	END SECTION (24") (CMP)	EA.	2	550	1,100
16	CROSS ROAD PIPE (24") (RCP)	L.F.	66	54	3,564
17	ENTRANCE PIPE (24") (CMP)	L.F.	32	42.50	1,360
18	ENTRANCE PIPE (54") (CMP)	L.F.	112	112	12,544
19	STEEL PLATE GUARDRAIL	L.F.	337.50	43	14,512.50
20	GUARDRAIL END TERMINAL (SKT)	EA.	3	2,200	6,600
21	SIGNING OBJECT MARKER (TYPE 3)	EA.	8	150	1,200
22	CONCRETE (GRADE 4.0)	C.Y.	6.2	725	4,495
23	CONCRETE (GRADE 4.0) (AE)	C.Y.	1.6	900	1,440
24	BRIDGE BACKWALL PROTECTION SYSTEM	S.Y.	10	35	350

<u>LINE ITEM NO.</u>	<u>ROAD ITEMS</u>	<u>UNIT</u>	<u>QUANTITY</u>	<u>UNIT COST</u>	<u>AMOUNT</u>
25	REINFORCING STEEL (GRADE 60)	LBS.	430	1.15	494.50
26	REINFORCING STEEL (GRADE 60) (EPOXY COATED)	LBS.	550	1.25	687.50
27	FOUNDATION STABILIZATION	C.Y.	4	60	240
28	CONCRETE FOR SEAL COURSE (SET)	C.Y.	1	\$175.00	\$175.00
29	GRANULAR BACKFILL (WINGWALLS) (SET)	C.Y.	1	\$50.00	\$50.00
30	MAILBOX INSTALLATION (SET)	EA.	1	\$140.00	\$140.00
	<u>BRIDGE ITEMS</u>				
31	EXCAVATION (CLASS 1)	C.Y.	120	30	3,600
32	EXCAVATION (CLASS 2)	C.Y.	206	85	17,510
33	CONCRETE (GRADE 4.0) (AE)	C.Y.	106.8	575	61,410
34	CONCRETE (GRADE 4.0) (AE) (SA)	C.Y.	268.4	685	183,854
35	REINFORCING STEEL (GRADE 60) (EPOXY COATED)	LBS	67,470	1.00	67,470
36	REINFORCING STEEL (GRADE 60)	LBS	3,800	1.05	3,990
37	STEEL PILES (HP 10x42)	L.F.	1,436	40	57,440
38	ABUTMENT AGGREGATE DRAIN	C.Y.	30	337	10,110
39	BRIDGE BACKWALL PROT. SYSTEM	S.Y.	48	30	1,440
40	SLOPE PROTECTION (RIP RAP STONE)	C.Y.	730	65	47,450
	<u>TEMPORARY EROSION CONTROL ITEMS</u>				
41	SWPPP DESIGN	L.S.	1	2,500	2,500
42	SWPPP INSPECTION	EA.	6	250	1,500
43	TEMPORARY SEEDING	L.S.	1	3,300	3,300
44	SILT FENCE	L.F.	240	5.00	1,200
45	BIODEGRADABLE LOG (20")	L.F.	240	11.00	2,640
46	SEDIMENT REMOVAL (SET)	C.Y.	1	\$35.00	\$35.00
47	TEMPORARY BERM (SET)	L.F.	1	\$1.20	\$1.20
48	WATER (EROSION CONTROL) (SET)	MGAL	1	\$35.00	\$35.00

<u>LINE ITEM NO.</u>	<u>PERMANENT SEEDING ITEMS</u>	<u>UNIT</u>	<u>QUANTITY</u>	<u>UNIT COST</u>	<u>AMOUNT</u>
49	SEEDING (PERMANENT)	L.S.	1	3,650	3,650
	<u>SURFACING ITEMS</u>				
50	HMA COMMERCIAL GRADE (CLASS A) (SURFACE)	TON	95	88	8,360
51	HMA COMMERCIAL GRADE (CLASS A) (BASE)	TON	379	88	33,352
52	AGGREGATE BASE (AB-3) (8")	S.Y.	871	9 ⁰⁰	7,839
53	WATER (AGGREGATE BASE) (SET)	MGAL	1	\$35.00	\$35.00
54	SURFACING MATERIAL (AB-3)	TON	85.0	20	1,700
	<u>TRAFFIC CONTROL ITEMS</u>				
55	WORK ZONE SIGNS (0 TO 9.25 S.F.)	EADA	10,350	0.11	1,138.50
56	WORK ZONE SIGNS (9.26 TO 16.25 S.F.)	EADA	1,050	1.05	1,102.50
57	WORK ZONE BARRICADES (TYPE III-4'-12')	EADA	1,950	1.05	2,047.50
58	WORK ZONE WARNING LIGHT (TYPE "A" LOW INTENSITY)	EADA	4,500	0.01	45
59	PORTABLE CHANGEABLE MESSAGE SIGN	EA.	14	78	1,092
60	TRAFFIC CONTROL (INITIAL SET UP)	L.S.	1	5,775	5,775



 TOTAL BID 794,978.40

CONTRACTOR Bryan - Ohlmeier Construction
Co., Inc.

NOTE: Bidder shall extend all items and total bid.

DOUGLAS COUNTY, KANSAS
PROJECT NO. 2013-20
BID #16-F-0002

CONTRACT

THIS CONTRACT, made and entered into this _____ day of _____, 2016, by and between the BOARD OF COUNTY COMMISSIONERS OF DOUGLAS COUNTY, KANSAS, Party of the First Part, hereinafter referred to as the COUNTY, and _____, Party of the Second Part, hereinafter referred to as the CONTRACTOR.

WITNESSETH:

Article 1: It is hereby mutually agreed, that for and in consideration of the sum or sums to be paid the Contractor by the County as set forth in the General Clauses, the said Contractor shall furnish all labor, equipment, accessories and materials (except materials salvaged or otherwise furnished as specified) and shall perform all work necessary to construct and complete the improvements in a good, substantial and workmanlike manner, ready for use, and in strict accordance with the Specifications and Contract Drawings as approved and filed pursuant to law in the Office of the County Clerk of Douglas County, Kansas.

Article 2: It is hereby further agreed, that, in consideration of the faithful performance of the work by the Contractor, the County shall pay the Contractor the sum or sums due him by reason of said faithful performance of the work, at stated intervals and in amounts certified by the Engineer, in accordance with the Specifications and Contract Documents, and set forth in the Proposal as accepted by the County, subject to compliance with K.S.A 68, Article 11.

Article 3: It is hereby further agreed that Contractor will, for a period of twelve (12) months following the County's acceptance of the Contractor's work, at the request of County, correct any defects in the work due to faulty or defective materials or workmanship, without additional cost to the County; provided that neither final payment by the County nor the acceptance of the Contractor's work shall relieve Contractor, or its surety under the Performance and Maintenance Bond, from such obligation to cure any such defects.

Article 4: It is hereby further agreed that, at the completion of the work, and its acceptance by the County, all sums due the Contractor by reason of his faithful completion of the work, taking into consideration additions to or deductions from the contract price by reasons of alterations or modifications of the original contract or by reasons of "Force Account" work authorized under the Contract in accordance with the provisions of the General Clauses, will be paid the Contractor by the County within sixty (60) days after said completion and acceptance.

Article 5: It is hereby further agreed, that the "he" or "him" wherever used herein as referring to the Contractor shall be deemed to referring to the Contractor, his-her-theirs heirs, executors, administrators, successors, or assigns.

DOUGLAS COUNTY, KANSAS
PROJECT NO. 2013-20
BID #16-F-0002

CONTRACT (continued)

Article 6: It is hereby further agreed that any reference herein to the "Contract Documents" shall include all "Contract Documents" as specifically set out in the Specifications and are hereby made a part of this Contract as fully as if set out in length herein.

IN WITNESS WHEREOF, the Party of the First Part and Party of the Second Part, respectively, have caused this agreement to be duly executed the day and year first hereinwritten, in quadruplicate, all copies of which to all intents and purposes shall be considered as the original.

ATTEST:

BOARD OF COUNTY COMMISSIONERS OF
DOUGLAS COUNTY, KANSAS

County Clerk

Chairman

Date

Commissioner

Commissioner

Approved as to Legality:

Douglas County Counselor

Name of Organization

Date

By: _____

Title of Signature

BOND NO. _____

DOUGLAS COUNTY, KANSAS
PROJECT NO. 2013-20
BID #16-F-0002

STATUTORY (PAYMENT) BOND

KNOW ALL MEN BY THESE PRESENTS THAT:

We, _____, as
Principal, and _____, a surety
company duly authorized to do business in the State of Kansas, as Surety, are held and firmly
bound unto the State of Kansas in the penal sum of _____
Dollars (\$ _____) (the current amount of the
contract price between Principal and Owner) lawful money of the United States of America, for
the payment of which sum well and truly to be made, bind ourselves and our respective heirs,
executors, administrators, successors, and assigns, jointly and severally, firmly by these
presents.

THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH THAT, WHEREAS,
the Principal has on the _____ day of _____, 20____, entered into a
written Agreement with the Board of County Commissioners of Douglas County, Kansas,
hereinafter called the Owner, for furnishing labor, equipment, material, and supplies used or
consumed in connection with the installation, construction of, or in making such improvements,
equipment, and services described in said Agreement, all in accordance with the plans,
specifications and other Contract Documents described therein and as supplemented and
otherwise changed during the project (the "Undertaking"). The Agreement (including but not
limited to the plans, specifications and other Contract Documents) is by reference made a part
hereof, and is hereinafter called the Contract.

NOW, THEREFORE, if the Principal or any Subcontractor or Subcontractors of the
Principal shall pay all indebtedness incurred for the Undertaking as required under the Contract,
then this obligation shall become null and void; otherwise, it shall remain in full force and effect.
If the Principal or any Subcontractor or Subcontractors of the Principal fails to duly pay all
indebtedness incurred for the Undertaking as required under the Contract, then the Surety shall
pay the same in any amount not exceeding the amount of this obligation, together with any
interest and attorneys' fees as provided by law.

PROVIDED, FURTHER, that the Surety hereby stipulates and agrees, for value
received, that no change, extension of time, modification, supplement, alteration or addition to
the undertakings, covenants, terms or conditions of the Contract or the Undertaking, shall in any
way affect its obligations on this bond. The Surety does hereby waive notice of any change,
extension of time, modification, supplement, alteration or addition to the terms or conditions of
the Contract or Undertaking. The Surety stipulates and agrees that the penal sum of this bond
shall be automatically increased or decreased by any change order(s) to the Contract as
approved by the Owner.

Nonpayment of the bond premium will not invalidate this bond nor shall the Owner be obligated for the payment of any bond premium.

The Surety and Principal agree that any persons interested shall have a direct right of action hereunder against the Principal and Surety.

IN WITNESS WHEREOF, the Principal and Surety have caused this bond to be duly signed this ____ day of _____, 20____.

Principal

By _____

(Official Title)

Surety Company

By: _____
(Attorney-In-Fact)

By: _____
(Kansas Agent)

(A certified copy of the Attorney-in-Fact's Power of Attorney from the Surety, to include the date and amount of the bond, must be attached to this bond).

DOUGLAS COUNTY, KANSAS

PROJECT NO. 2013-20

BID #16-F-0002

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS THAT:

We, _____, as Principal, and _____, a surety company duly authorized to do business in the State of Kansas, as Surety, are held and firmly bound unto the Board of County Commissioners of Douglas County, Kansas, as Obligee, in the penal sum of _____ Dollars (\$_____) (the current amount of the contract price between Principal and Obligee), lawful money of the United States of America, for the payment of which sum well and truly to be made, bind ourselves, and our respective heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH THAT, WHEREAS, the Principal has, on _____, 20____, entered into a written Agreement with the Obligee for furnishing labor, equipment, material, and supplies in connection with the installation, construction of or in making such improvements, equipment, and services described in said Agreement, all in accordance with the plans, specifications and other Contract Documents described therein and as supplemented and otherwise changed during the project. The Agreement (including but not limited to the plans, specifications and other Contract Documents) is by reference made a part hereof, and is hereinafter called the Contract.

NOW, THEREFORE, if the Principal shall and will, in all particulars, well, duly and faithfully observe, perform and abide by each and every covenant, condition, obligation and part of the Contract, according to the true intent and meaning in each case, and hold the Obligee harmless against all claims, loss or damage which it may sustain or suffer by reason of any breach of said Contract by said Principal or by reason of any injury to persons or property occasioned by the action of said Principal or its employees, and if said Principal maintains the improvement, equipment, and service as provided for in said Contract and make good all defects in materials and workmanship as required under the Contract, then this obligation shall be and become null and void; otherwise, it shall remain in full force and effect. Whenever the Principal is, and is declared by the Obligee to be, in default under the Contract, the Surety shall remedy the default at its expense by promptly (a) completing the Contract in accordance with its terms and conditions, through its agents or independent contractors; or (b) obtaining a bid or bids for completing the Contract in accordance with its terms and conditions, and, upon determination by the Obligee of the lowest and best bid, arrange for an agreement between such bidder and the Obligee, secured by payment and performance bonds, and pay to Obligee the final cost of such agreements less the balance of the Contract Price, but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof as the same may be increased by change order(s) to the Contract as approved by the Obligee; or (c) work out such other arrangements as are accepted by Obligee in writing. The term "balance of the Contract Price," as used herein, shall mean the total amount payable by the Obligee to the Principal under the Contract, and any amendments thereto, less the amount paid by the Obligee to the Principal.

PROVIDED, FURTHER, that the Surety hereby stipulates and agrees, for value received, that no change, extension of time, modification, supplement, alteration or addition to the undertakings, covenants, terms or conditions of the Contract or the Undertaking, shall in any way affect its obligations on this bond. The Surety does hereby waive notice of any change, extension of time, modification, supplement, alteration or addition to the terms or conditions of the Contract or Undertaking. The Surety stipulates and agrees that the penal sum of this bond shall be automatically increased or decreased by any change order(s) to the Contract as approved by the Obligee. Principal and Surety further stipulate and agree that acceptance, approval or certification of completion of work under the Contract and/or payment (final or otherwise) by Obligee shall not relieve the Principal or Surety from any liability for any failure to fully perform the Contract or any other obligation on this bond.

Nonpayment of the bond premium will not invalidate this bond nor shall the Obligee be obligated for the payment of any bond premium.

IN WITNESS WHEREOF, the Principal and Surety have caused this bond to be duly signed this ____ day of _____, 20 ____.

Principal

By _____

(Official Title)

Surety Company

By: _____
(Attorney-In-Fact)

By: _____
(Kansas Agent)

(A certified copy of the Attorney-in-Fact's Power of Attorney from the Surety, to include the date and amount of the bond, must be attached to this bond).
Sufficiency of the Bond Approved by:

Chairperson of Board of County Commissioners

Date: _____

Form and Amount of Bond Approved By:

County Counselor

Date: _____

NOTE:

1. Date of bond must not be prior to date of Agreement.
2. If Principal is a partnership, all partners should execute bond.
3. Surety companies executing bonds must appear on the U.S. Department of the Treasury's most current listing of approved sureties (Department Circular 570, as amended), and be authorized to transact business in the State of Kansas.
4. Accompany this bond with Attorney-in-Fact's authority from the Surety certified to include the date of the bond.

SPECIAL PROVISIONS
TO THE
STANDARD SPECIFICATIONS
EDITION OF 2007

NOTE: Whenever this special provision conflicts with the Plans, Supplemental Specifications or Standard Specifications, this Special Provision shall govern.

SALES TAX EXEMPTION

In accordance with the provisions of K.S.A. 79-3606 (b), this Douglas County Project qualifies for Sales Tax Exemption. A sales tax exemption certificate number will be furnished to the Contractor following award of the Contract. The Contractor shall furnish to the Engineer copies of invoices on all materials incorporated in this project.

SPECIAL PROVISIONS
TO THE
STANDARD SPECIFICATIONS
EDITION OF 2007

NOTE: Whenever this special provision conflicts with the Plans, Supplemental Specifications or Standard Specifications, this Special Provision shall govern.

DOUGLAS COUNTY
CONTRACTUAL PROVISIONS ATTACHMENT

- (a) Terms Herein Controlling Provisions: It is expressly agreed that the terms of each and every provision in this attachment shall prevail and control over the terms of any other conflicting position in any other document relating to and a part of the contract in which this attachment is incorporated. As used herein, the term "Douglas County" shall refer to Douglas County and any of its agencies, offices, and departments entering into the contract.
- (b) Agreement With Kansas Law: All contractual agreements shall be subject to, governed by, and construed according to the laws of the State of Kansas.
- (c) Termination Due to Lack of Funding Appropriation: If, in the judgment of the County Administrator, sufficient funds are not appropriated to continue the function performed in this agreement and for the payment of the charges hereunder, Douglas County may terminate this agreement at the end of its current fiscal year. Douglas County agrees to give written notice of termination to vendor/contractor at least 30 days prior to the end of its current fiscal year, and shall give such notice for a greater period prior to the end of such fiscal year as may be provided in the contract, except that such notice shall not be required prior to 90 days before the end of such fiscal year. Vendor/contractor shall have the right, at the end of such fiscal year, to take possession of any unpaid equipment provided Douglas County under the contract. Douglas County will pay to the vendor/contractor all regular contractual payments incurred through the end of such fiscal year, plus contractual charges incidental to the return of any such equipment. Upon termination, of the agreement by Douglas County, title to any such unpaid equipment shall revert to vendor/contractor at the end of Douglas County's current fiscal year. The termination of the contract pursuant to this paragraph shall not cause any penalty to be charged to Douglas County or the vendor/contractor.
- (d) Disclaimer of Liability: Douglas County shall not hold harmless or indemnify any vendor/contractor beyond that liability under the Kansas Tort Claims Act (K.S.A 75-6101 et seq.).
- (e) Arbitration, Payment Due, Interest, Warranties: Notwithstanding any language to the contrary, no interpretation shall be allowed to find Douglas County has agreed to binding arbitration, or the payment of damages or penalties upon the occurrence of a contingency.

Payment from Douglas County to vendor/contractor shall not be due sooner than 30 days after the delivery of an invoice from vendor/contractor to Douglas County. Further, Douglas County does not agree to pay attorney fees or late payment charges beyond those available under K.S.A. 16-201, and no provision will be given effect which attempts to exclude, modify, disclaim or otherwise attempt to limit implied warranties of merchantability and fitness for a particular purpose.

- (f) Representative's Authority To Contract: By signing this contract, the representative of the vendor/contractor hereby represents that such person is duly authorized by the vendor/contractor to execute this contract on behalf of the vendor/contractor and that the vendor/contractor agrees to be bound by the provisions thereof.
- (g) Responsibility For Taxes: Douglas County shall not be responsible for, nor indemnify vendor/contractor for, any federal, state, or local taxes which may be imposed or levied upon the subject matter of this contract.
- (h) Anti-Discrimination Clause: The vendor/contractor agrees: (a) to comply with the Kansas Act Against Discrimination (K.S.A. 44-1001 et seq.) and the Kansas Age Discrimination in Employment Act (K.S.A. 44-1111 et seq.) and the applicable provisions of the Americans with Disabilities Act (42 U.S.C. 12101 et seq.) (ADA) and to not discriminate against any person because of race, religion, color sex, disability, national origin or ancestry, or age in the admission or access to, or treatment or employment in, its programs or activities; (b) to include in all solicitations or advertisements for employees, the phrase "equal opportunity employer"; (c) to comply with the reporting requirements set out at K.S.A. 44-1031 and K.S.A. 44-1116; (d) to include those provisions in every subcontract or purchase order so that they are binding upon such subcontractor or vendor; (e) that a failure to comply with the reporting requirements of (c) above or if the vendor/contractor is found guilty of any violation of such acts by the Kansas Human Rights Commission, such violation shall constitute a breach of contract and the contract may be cancelled, terminated or suspended, in whole or in part, by Douglas County; (f) if it is determined that the vendor/contractor has violated applicable provisions of ADA, such violation shall constitute a breach of contract and the contract may be cancelled, terminated or suspended, in whole or in part by Douglas County.

Parties to this contract understand that the provisions of this paragraph (h) (with the exception of those provisions relating to the ADA) are not applicable to a vendor/contractor who employs fewer than four employees during the term of such contract or whose contracts with Douglas County cumulatively total \$5,000 or less during the fiscal year of Douglas County.

SPECIAL PROVISIONS
TO THE
STANDARD SPECIFICATIONS
EDITION OF 2007

NOTE: Whenever this special provision conflicts with the Plans, Supplemental Specifications or Standard Specifications, this Special Provision shall govern.

GENERAL DESCRIPTION:

Douglas County Project No. 2013-20 consists of removing a 67' Reinforced Concrete Frame Bridge, Grading, Construction of a 30'-40'-30' R.C. Haunch Slab (RCSH) Bridge, Pile Driving, Pre-Cast RCB, RCB extension, RCP, Asphalt approach transitions, and Traffic Control.

Project No. 2013-20 is located on Rte 458 approximately 6 miles SW of Lawrence, KS.

SPECIAL PROVISIONS
TO THE
STANDARD SPECIFICATIONS
EDITION OF 2007

NOTE: Whenever this special provision conflicts with the Plans, Supplemental Specifications or Standard Specifications, this Special Provision shall govern.

PLANS: The following plans accompany and supplement the Specifications:

<u>Sheet No.</u>	<u>Sheet Title</u>
1	Title
2	Typical Sections
3	Foundation Treatment & Compaction of Earthwork
4	Plan and Profile
5-6	Concrete Bridge Approach Pavement
7-13	Guardrail
14	Concrete End Sections
15	Metal End Sections
16	Summary of Culverts
17	RCB Auxiliary Details (LRFD)
18-20	Culvert Extensions
21-38	Bridge Sheets
39	Summary of Quantities
40-46	Temporary Erosion Control
47	Seeding
48	Summary of Quantities (Surfacing)
49-55	Traffic Control
56-62	Cross Sections

SPECIAL PROVISIONS
TO THE
STANDARD SPECIFICATIONS
EDITION OF 2007

NOTE: Whenever this special provision conflicts with the Plans, Supplemental Specifications or Standard Specifications, this Special Provision shall govern.

ENGINEER: For the performance of work under this Contract, Douglas County, Kansas will perform the duties of the Engineer, as defined in the Specifications and hereinafter is referred to as the Engineer.

SPECIAL PROVISIONS
TO THE
STANDARD SPECIFICATIONS
EDITION OF 2007

NOTE: Whenever this special provision conflicts with the Plans, Supplemental Specifications or Standard Specifications, this Special Provision shall govern.

OPERATIONS OF OTHERS: The right is reserved by the County to have other work performed by other Contractors and to permit public utility companies and others to do work during the construction of and within the limits of or adjacent to the Project. The Contractor shall conduct his operations and cooperate with such other parties so that interference with such other work will be reduced to a minimum. The Contractor shall agree, and hereby does agree, to make no claims against the County for additional compensation due to delays or other conditions created by the operations of other such parties. Should a difference of opinion arise as to the rights of the Contractor and others working within the limits of or adjacent to the Project, the Engineer will decide as to the respective rights of the various parties involved in order to assure the completion of the work in general harmony and in a satisfactory manner and his decision shall be final and binding upon the Contractor.

To expedite the completion of the over-all Project, it will be necessary for the work under this Contract to be coordinated with the construction under other contracts and by others. As far as possible, each Contractor shall so plan and conduct his operations and dispose of his materials as not to interfere with the operations of or damage the work of others engaged upon the construction of the overall Project. The Contractor shall perform his work in proper sequence with relation to that of the other Contractors and as the Engineer may direct. Each Contractor starting work while construction under other Contracts is in progress within the limits of the Project shall begin his work at certain locations which the Engineer may designate or approve and thereafter shall prosecute the work at such locations and in such order as the Engineer may from time to time prescribe or approve.

SPECIAL PROVISIONS
TO THE
STANDARD SPECIFICATIONS
EDITION OF 2007

NOTE: Whenever this special provision conflicts with the Plans, Supplemental Specifications or Standard Specifications, this Special Provision shall govern.

INSPECTION: The Contractor shall furnish access to all parts of the Project for inspection by the Engineer or authorized representative of the Engineer. The Contractor shall notify the Engineer twenty-four (24) hours in advance of beginning work which requires inspection.

SPECIAL PROVISIONS
TO THE
STANDARD SPECIFICATIONS
EDITION OF 2007

NOTE: Whenever this special provision conflicts with the Plans, Supplemental Specifications or Standard Specifications, this Special Provision shall govern.

RIGHT-OF-WAY: The right-of-way will be available for use by the Contractor for access roads and storage space; provided that such use does not interfere with the permanent construction of the overall Project under this or any other contract and shall be subject to similar use by other Contractors working on various parts of the Project. Such use shall not impair the safety of the traveling public. Right-of-way shall be restored by the Contractor to its original condition before final payment will be made.

SPECIAL PROVISIONS
TO THE
STANDARD SPECIFICATIONS
EDITION OF 2007

NOTE: Whenever this special provision conflicts with the Plans, Supplemental Specifications or Standard Specifications, this Special Provision shall govern.

SPECIFICATIONS: The bidder and/or Contractor are required to furnish his own copies of the Standard Specifications for State Road and Bridge Construction of the Kansas Department of Transportation, Edition of 2007.

<http://www.ksdot.org/burConsMain/specprov/2007SSDefault.asp>

SPECIAL PROVISIONS
TO THE
STANDARD SPECIFICATIONS
EDITION OF 2007

NOTE: Whenever this special provision conflicts with the Plans, Supplemental Specifications or Standard Specifications, this Special Provision shall govern.

INDEMNITY PROVISION: The Contractor hereby agrees to indemnify and hold harmless the County for any liability resulting from the injury or death of any person, including Contractor's employees, arising from unsafe conditions at the work site. "Unsafe" shall mean a failure by the Contractor to adhere to any applicable federal, state or local government standards established to protect the health, safety and welfare of the Contractor's employee, other persons at the work site, and the public in general.

SPECIAL PROVISIONS
TO THE
STANDARD SPECIFICATIONS
EDITION OF 2007

NOTE: Whenever this Special Provision conflicts with the Plans, Supplemental Specifications or Standard Specifications, this Special Provision shall govern.

SECTION 804

MAINTENANCE AND RESTORATION

OF HAUL ROADS

SUBSECTION 804.1, DESCRIPTION, Page 800-10, Delete the second paragraph and replace with the following:

For the purpose of this specification, a haul road is any public road in Kansas, excluding State highways, over which 2,000 tons or more material is hauled for the construction of the project. Such material includes both commercial delivery and Contractor production.

(Note: The following sentence has been deleted from Subsection 804.1: "Roads normally used for hauling commercial material into or from established plant sites and quarries are not designated as part of the haul road.")

SUBSECTION 804.4, MEASUREMENT AND PAYMENT, Page 800-10, Delete the first paragraph and replace with the following:

If the Contractor is obligated to perform maintenance and restoration as stated within Section 804, with exception of dust control, the Engineer will Measure and Pay "Maintenance and Restoration of Haul Roads (Set)" as a lump sum.

Labor, Equipment, Materials and incidentals necessary to reduce dust on active haul roads including return routes, in pits and staging areas, and on the project will not be measured directly but shall be considered subsidiary to other items in the contract.

SPECIAL PROVISION
TO THE
STANDARD SPECIFICATIONS
EDITION OF 2007

NOTE: Whenever this special provision conflicts with the Plans, Supplemental Specifications of Standard Specifications, this Special Provision shall govern.

SECTION 611

HOT MIX ASPHALT (HMA) – COMMERCIAL GRADE

SECTION 611.1 DESCRIPTION, Add the following Bid Items:

<u>BID ITEMS</u>	<u>UNITS</u>
HMA – COMMERCIAL GRADE (CLASS A) (SURFACE)	TON
HMA – COMMERCIAL GRADE (CLASS A) (BASE)	TON
HMA – COMMERCIAL GRADE (CLASS A) (PATCH)	TON

SECTION 611.2 MATERIALS, TABLE 611-1,

Change the "Reclaimed Asphalt Pavement (RAP) (max. %)" from 25% to 10% for mixes designated for surface construction and 30% for mixes designated for patching and/or asphalt base construction.

Change the Binder requirement to PG64-22.

Delete note (1) shown below table 611-1.

SPECIAL PROVISIONS
TO THE
STANDARD SPECIFICATIONS
EDITION OF 2007

NOTE: Whenever this special provision conflicts with the Plans, Supplemental Specifications or Standard Specifications, this Special Provision shall govern.

PRICE ADJUSTMENT FOR ASPHALT MATERIALS

Prices quoted for asphalt material (HMA – Commercial Grade (Class A)) will be based on the Computed Monthly Asphalt Material Index in effect for January, 2016 as listed @ <http://www.ksdot.org/burconsmain/ppreq/AsphaltPriceIndex.asp>. Hot mix asphalt provided/placed will be adjusted in subsequent months \$0.50/ton for each \$10.00 increase/decrease in the Computed Monthly Asphalt Material Index, based on the initial price index shown for January, 2016.

The adjusted unit cost will apply until all work is complete. If contract time expires, no additional increases will be allowed, but if the asphalt price decreases during this time the revised unit costs will reflect this change.

Example:

Change in Price of Asphalt Oil/Ton	Adjustment in the Bid Price of Asphalt Mat'l
\$0.00 - \$9.99	\$0.00
\$10.00 - \$19.99	\$0.50
\$20.00 - \$29.99	\$1.00
\$30.00 - \$39.99	\$1.50

SPECIAL PROVISIONS
TO THE
STANDARD SPECIFICATIONS
EDITION OF 2007

NOTE: Whenever this special provision conflicts with the Plans, Supplemental Specifications of Standard Specifications, this Special Provision shall govern.

Project Scheduling, Specified Calendar Completion Date, Liquidated Damages and Temporary Seeding:

1. The "Notice to Proceed" will be issued on **May 2, 2016**. A minimum of 96 hours notice is required before closing any roadway.
2. Project 2013-20 (Br. No. 10.00N-16.38E) shall be completed and opened to "unrestricted traffic" before **September 30, 2016**.
"Unrestricted Traffic" is defined in Section 108.4 of the Specifications.
3. The Contractor will be allowed 5 clean-up calendar days as per Section 108.6 & 108.4c(3).
4. Liquidated damages shall be as shown in section 108.8, (Table 108-1) of the Standard Specifications.
5. Temporary Seeding:
 - Temporary Seeding should follow Special Provision 07-09002-R10 at anytime that Permanent Seeding cannot be accomplished or as directed by the Engineer.
 - Temporary Seeding Items are as follows:
 - i. Temporary Fertilizer (10-10-10) at 250 Lbs./Ac
 - ii. Canada Wildrye at 45 Lbs./Ac
 - iii. Grain Oats at 45 Lbs./Ac
 - iv. Sterile Wheatgrass at 20 Lbs./Ac
 - v. Mulch at 2 tons/Ac.

KANSAS DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION TO THE
STANDARD SPECIFICATIONS, EDITION 2007

Delete SECTION 401 and replace with the following:
SECTION 401

CONCRETE

401.1 DESCRIPTION

Provide the grades of concrete specified in the Contract Documents.

401.2 MATERIALS

Provide materials that comply with the applicable requirements.

Coarse, Fine and Mixed Aggregate	DIVISION 1100
Admixtures, Plasticizers, and Silica Fume	DIVISION 1400
Cement, Fly Ash, and Ground Granulated Furnace Slag.....	DIVISION 2000
Water	DIVISION 2400

ADD THE FOLLOWING -

401.25 CONCRETE USED ON DOUGLAS COUNTY PROJECTS

a. ALL CONCRETE USED ON DOUGLAS COUNTY PROJECTS MUST BE PREVIOUSLY APPROVED BY KDOT (SECTION 401 – LATEST EDITION) FOR A SIMILAR PROJECT OR USE, AND HAVE AN ASSIGNED KDOT MIX DESIGN NUMBER.

b. ALL MIX DESIGN SUBMITTALS SHALL BE FILLED OUT ON KDOT FORM 694 WITH DOUGLAS COUNTY PROJECT(S) AND BID NUMBERS ALONG WITH THE KDOT MIX DESIGN NUMBER.

401.3 CONCRETE MIX DESIGN

a. General. Design the concrete mixes specified in the Contract Documents.

Provide aggregate gradations that comply with **SECTION 1102** and Contract Documents.

If desired, contact the DME for available information to help determine approximate proportions to produce concrete having the required characteristics on the project.

Take full responsibility for the actual proportions of the concrete mix, even if the Engineer assists in the design of the concrete mix.

Submit all concrete mix designs to the Engineer for review and approval. Submit completed volumetric mix designs on KDOT Form No. 694 (or other forms approved by the DME).

Do not place any concrete on the project until the Engineer approves the concrete mix designs. Once the Engineer approves the concrete mix design, do not make changes without the Engineer's approval.

Submit test data from KT-73, KT-79 or AASHTO T-277 for all bridge overlays and any project with over 250 cubic yards of concrete (this includes concrete for structures, pavement, etc). Provide the test data for each mix, tested at the highest water-cement ratio. The mix design and test data must be submitted to KDOT at least 60 days prior to placement of concrete on the project. Two options are available for mix design procedures. Use the procedures outlined in **subsection 401.3b.** or Appendix A to design concrete mixes.

b. Concrete Mix Design Based On Previous Data. Provide concrete mix designs based on previous 28-day compressive strength test data from similar concrete mixtures. Similar mixtures are within 1000 psi of the specified 28-day compressive strength, and are produced with the same type and sources of cementitious materials, admixtures and aggregates. Consider sand sources the same, provided they are not more than 25 miles apart on the same river and no tributaries enter the river between the 2 points. Consider crushed locations similar if they are mined in one continuous operation, and there is no significant change in geology. Mixes that have changes of more than 10% in proportions of cementitious materials, aggregates or water content are not considered similar. Air entrained mixes are not considered similar to non-air entrained mixes. Test data should represent at least 30 separate batches of the mix. One set of data is the average of at least 2 cylinders from the batch. The data shall represent a minimum of 45 days of production within the past 12 months. Do not include data over 1 year old. When fewer than 30 data sets are available, the standard deviation of the data must be corrected to compensate for the fewer data points.

Provide a concrete mix design that will permit no more than 5% of the 28-day compressive strength tests to fall below the specified 28-day compressive strength (f'_c) based on equation A, and no more than 1% of the 28-day compressive strength tests to fall below the specified 28-day compressive strength (f'_c) by more than 500 psi based on equation B.

Equation A: $f'_{cr} = f'_c + 1.62 \cdot k \cdot s$

Equation B: $f'_{cr} = (f'_c - 500) + 2.24 \cdot k \cdot s$

Where: f'_{cr} = average 28-day compressive strength required to meet the above criteria.

f'_c = specified 28-day compressive strength
 s = standard deviation of test data
 k = constant based on number of data points
 n = number of data points
 $k = 1.3 - n / 100$, where $15 < n < 30$
 $k = 1$, where $n > 30$

Provide a concrete mix design that has an average compressive strength that is equal to the larger of Equation A or Equation B. Submit all supporting test data with the mix design.

All other concrete mix designs.

For concrete mixes that have fewer than 15 data points, or if no statistical data is available, use Equations A and B to calculate f'_{cr} using the following values.

$s = 20\%$ of the specified 28-day compressive strength (f'_c)
 $k = 1$

Provide 28-day compressive strength test data at 3 different water–cementitious ratios showing compliance with required f'_{cr} . Each set of test data shall be the average of a minimum of 3 cylinders. These mixes shall utilize materials that will be used on the project.

c. Air-Entrained Concrete for Pavement. Design air-entrained concrete for pavement according to **TABLE 401-1.**

TABLE 401-1: AIR-ENTRAINED CONCRETE FOR PAVEMENT

Type of Agg (SEC 1100)	lb. of Cementitious per yd ³ of Concrete, minimum ¹	lb. of Water per lb. of Cementitious, maximum ²	Percent of Air by Volume ³	28-Day Compressive Strength psi minimum	Volume of Permeable Voids ^{4,5} , maximum	Surface Resistivity ^{4,5} , minimum	Rapid Chloride Permeability ^{4,5} , maximum
Coarse and Fine	564	0.47	See subsection 401.3h.	4000	12.00%	9.0 kΩ-cm	3000 Coulombs
MA-2							
MA-3							
MA-4							
	517						

¹The amount of cementitious listed is the designated minimum for concrete pavement. It may be necessary to add additional cementitious or otherwise adjust the mix proportions as permitted by the specifications to provide a mix design that complies with the compressive strength requirement.

²Maximum limit of lb. of water per lb. of cementitious includes free water in aggregates, but excludes water of absorption of the aggregates.

³The maximum air content is 10%. Take immediate steps to reduce the air content whenever the air content exceeds 8%.

⁴Provide concrete for pavement with either a maximum 28-day Volume of Permeable Voids of 12.0% as per KT-73, a minimum 28-day Surface Resistivity of 9.0 kΩ-cm as per KT-79, or a maximum 56-day Rapid Chloride Permeability of 3000 Coulombs as per AASHTO T-277 when required. Submit accelerated cure procedures for the Engineer's approval.

⁵Exclude these requirements for concrete patching material used in SECTION 833 when the existing pavement to be patched is more than 10 years old.

Improvements in concrete strength, workability and durability are possible if the combined aggregate grading is optimized. Procedures found in ACI 302.1 or other mix design techniques are acceptable in optimizing the mix design.

Use either Air-Entrained Concrete for Pavement or Optimized, Air-Entrained Concrete for Pavement. Provide the Engineer written notification of the selection prior to the pre-construction conference.

Submit the concrete mix design, and supply the Engineer with the necessary materials to enable the Engineer to test the mix properties at least 60 days before the anticipated date of using the design on the project and include the following information:

(1) A single point grading for the combined aggregates along with a plus/minus tolerance for each sieve to the Engineer. Use plus/minus tolerances to perform quality control checks and by the Engineer to perform aggregate grading verification testing. The tests may be performed on the combined materials or on individual aggregates, and then theoretically combined to determine compliance.

(2) Laboratory 28-day compressive strength test results on a minimum of 1 set of 3 cylinders produced from the proposed mix design, utilizing the actual materials proposed for use on the project. Design compressive strength should be a minimum of 2 of the Contractor's normal standard deviations for this type of mix above 4000 psi (cylinders) or meet the requirements of **subsection 401.3b**.

(3) Use historical mix production data for the plant used on the project to substantiate the standard deviation selected. If such historical data is not available or is unacceptable to the Engineer, use 5300 psi for design strength.

The Engineer will provide an initial review of the design within 5 business days following submittal. After initial review, the Engineer will perform any testing necessary to verify the design.

To verify the mix design in the field, perform compressive strength tests on cylinders made from samples taken from concrete produced at the project site before or during the first day that concrete pavement is placed on the project. If the compressive strength tests indicate noncompliance with minimum design values, add additional cement to the mix or make other appropriate mix design changes at no additional cost to KDOT.

d. Air-Entrained Concrete for Shoulders. Design air-entrained concrete for shoulders according to **TABLE 401-2**.

TABLE 401-2: AIR-ENTRAINED CONCRETE FOR SHOULDERS						
Type of Aggregate (SECTION 1100)	Lb. of Cementitious per yd ³ of Concrete, minimum	Lb. of Water per Lb. of Cementitious, maximum ¹	Percent of Air by Volume ²	Volume of Permeable Voids ^{3,4} , maximum	Surface Resistivity ^{3,4} , minimum	Rapid Chloride Permeability ^{3,4} , maximum
Coarse and Fine	520	0.49	See subsection 401.3h.	12.00%	9.0 kΩ-cm	3000 Coulombs
MA-2						
MA-3	480					
MA-4						

¹Maximum limit of lb. of water per lb. of cementitious includes free water in aggregates, but excludes water of absorption of the aggregates.

²The maximum air content is 10%. Take immediate steps to reduce the air content whenever the air content exceeds 8%.

³Concrete for shoulders using the same aggregates and gradations as the mainline pavement concrete on the same project will be approved without testing for Volume of Permeable Voids, Surface Resistivity, or Rapid Chloride Permeability.

⁴Exclude these requirements for concrete patching material used in SECTION 833 when the existing pavement to be patched is more than 10 years old.

e. Concrete for Structures. Design concrete for structures as outlined in subsection 401.3b. with a maximum water to cementitious ratio of 0.50 and a minimum cementitious content of 480 lbs per cubic yard according **TABLE 401-3a** and 401-3b.

TABLE 401-3a: CONCRETE		
Specified 28 Day Compressive Strengths, minimum, psi <i>f'</i>c		
Grade of Concrete:	Non Air Entrained Concrete	Air Entrained Concrete
Grade 6.0	6,000	6,000
Grade 5.0	5,000	5,000
Grade 4.5	4,500	4,500
Grade 4.0	4,000	4,000
Grade 3.5	3,500	3,500
Grade 3.0	3,000	3,000
Grade 2.5	2,500	2,500

(1) Provide air entrained concrete for structures with a target air content of 6.5 ± 1.5 percent.

(2) Maximum air content is 10%. Take immediate steps to reduce the air content whenever the air content exceeds 8%.

(3) Determine air content by KT-19 (Rollometer). A regularly calibrated air meter may be used for production with random verification by the rollometer. See KT-19 for special requirements when using the rollometer with high cementitious concretes or mixtures with midrange water reducers or plasticizers.

TABLE 401-3b: PERMEABILITY REQUIREMENTS FOR CONCRETE FOR STRUCTURES				
	Volume of Permeable Voids¹, maximum	Surface Resistivity¹, minimum	Rapid Chloride Permeability¹, maximum	ASTM C-1567² Accelerated Mortar Bar Expansion
Use Low Permeability Concrete (LPC) for Bridge Overlays	9.5%	27.0 kΩ-cm	1000 Coulombs	0.10% @ 16 days
Use Moderate Permeability Concrete (MPC) for specified Full Depth Bridge Decks	11.0%	13.0 kΩ-cm	2000 Coulombs	0.10% @ 16 days
Use Standard Permeability Concrete (SPC) for all other structure concrete not specified as Low Permeability or Moderate Permeability	12.0%	9.0 kΩ-cm	3000 Coulombs	0.10% @ 16 days

¹ Perform 28-day Volume of Permeable Voids as per KT-73, 28-day Surface Resistivity as per KT-79, or 56-day Rapid Chloride Permeability as per AASHTO T-277 when required. Submit accelerated cure procedures for the Engineer's approval.

² ASTM C-1567 only required if supplementary cementitious materials (SCMs) are utilized in the concrete.

(4) Use Quality Requirements for Structural Aggregates as listed in Special Provision to the Standard Specification 07-11009 (latest revision) Aggregates For Concrete Not Placed on Grade.

(5) Use gradation requirements for aggregates as listed in Special Provision to the Standard Specification 07-11009 Aggregates For Concrete Not Place on Grade.

(6) Use MA-6 optimized gradation for Low Permeability Concrete for Bridge Overlays.

(7) Improvements in concrete strength, workability, durability and permeability are possible if the combined aggregate grading is optimized. Procedures found in ACI 302.1 or other mix design techniques are acceptable in optimizing the mix design. See Appendix B for suggested guidelines for meeting permeability requirements.

(8) A water-reducing admixture for improving workability may be required. Adjust the designated slump accordingly.

(9) Adjust the yield cement factor (ycf) for higher air within specification limits, as allowed in the Contract Documents.

(10) When opted for, use Silica Fume for Bridge Overlays either singly or in combination with SCM's as allowed in **TABLE 401-5** and **TABLE 401-8**.

(11) When used, add silica fume with other cementitious materials during batching procedures. If the silica fume cannot be added to the cementitious materials it must be added loose to the bottom of the drum previous to the dry materials. The drum shall be wet with no standing water and not turning. The Engineer may approve shreddable bags on a performance basis, only when a central batch mixing process is used. If so, then add the bags to half of the mixing water and mix before adding cementitious materials, aggregate and remainder of water.

(12) When used, mix silica fume modified concrete for a minimum of 100 mixing revolutions.

(13) Delay the commencement of tests from 4 to 4½ minutes after the sample has been taken from a continuous mixer. If a batch type mixer is used, take the tests at the point of placement and begin testing immediately.

f. Portland Cement and Blended Hydraulic Cement. Unless specified otherwise in the Contract Documents, select the type of portland cement or blended hydraulic cement according to **TABLE 401-5**.

TABLE 401-5: PORTLAND CEMENT & BLENDED HYDRAULIC CEMENT	
Concrete for:	Type of Cement Allowed
Bridge Overlays and Concrete Pavement	Type IP(x) Portland-Pozzolan Cement Type IS(x) Portland-Blast Furnace Slag Cement Type IT(Ax)(By) Ternary Blended Cement Type II Portland Cement
All Structures other than Bridge Overlays and Concrete Pavement	Type I Portland Cement Type IP(x) Portland-Pozzolan Cement Type IS(x) Portland-Blast Furnace Slag Cement Type IT(Ax)(By) Ternary Blended Cement Type II Portland Cement
High Early Strength Concrete	Type III Portland Cement Type I, IP(x), IS(x), IT(Ax)(By), or II Cement may be used if strength and time requirements are met.

g. Design Air Content. With the exception of concrete for PCCP, use the middle of the specified air content range for the design of air-entrained concrete.

For PCCP concrete, provide a minimum air content that complies with these 2 criteria:

- a minimum by volume of 5.0% behind the paver, and
- a maximum air void spacing factor of 0.01 inch behind the paver¹.

For a typical PCCP, design the mix at the target air content plus 0.5% air content. The target air content is the air content that meets both criteria above.

If the air void spacing factor exceeds 0.01 inch, use the following formula as a guide to determine the target air content¹:

$$\text{Target \% air content at 0.01 inch} = \% \text{ air measured} + (\text{measured spacing factor} - 0.01)/0.001$$

Mixes with Laboratory or Field Prequalification spacing factors greater than 0.01 inch will not be approved.

Take immediate steps to reduce the spacing factor whenever the spacing factor exceeds 0.01 inch. Suspend paving operations when the spacing factor exceeds 0.015 inches and remove and replace the represented concrete¹.

Take immediate steps to increase the air content whenever the air content behind the paver falls below 5.0%. Suspend paving operations when 2 consecutive air contents behind the paver fall below 4.0% and remove and replace the represented concrete.

¹Does not apply to concrete used in **SECTION 833** when existing pavement to be patched is more than 10 years old.

h. Admixtures for Acceleration, Air-Entraining, Plasticizing, Set Retardation and Water Reduction. Verify that the admixtures used are compatible and will work as intended without detrimental effects. Use the dosages recommended by the admixture manufacturers. Incorporate and mix the admixtures into the concrete mixtures according to the manufacturer's recommendations. Determine the quantity of each admixture for the concrete mix design.

Redosing is permitted to accomplish slump control or air content in the field, when approved by the Engineer, time and temperature limits are not exceeded, and at least 30 mixing revolutions remain before redosing. Redose with up to 50% of the original dose.

If another admixture is added to an air-entrained concrete mixture, determine if it is necessary to adjust the air-entraining admixture dosage to maintain the specified air content.

(1) Accelerating Admixture. When specified in the Contract Documents, or in situations that involve contact with reinforcing steel and require early strength development to expedite opening to traffic, a non-chloride accelerator may be approved. The Engineer may approve the use of a Type C or E accelerating admixture. A Grade 2 calcium chloride accelerator may be used when patching an existing pavement more than 10 years old.

Add the calcium chloride by solution (the solution is considered part of the mixing water).

- For a minimum cure of 4 hours at 60°F or above, use 2% (by dry weight of cement) calcium chloride.
- For a minimum cure of 6 hours at 60°F or above, use 1% (by dry weight of cement) calcium chloride.

(2) Air-Entraining Admixture. When specified, use an air-entrainer in the concrete mixture.

(3) Water-Reducers and Set-Retarders. If unfavorable weather or other conditions adversely affect the placing and finishing properties of the concrete mix, the Engineer may allow the use of water-reducers and set-retarders. If the Engineer approves the use of water-reducers and set-retarders, their continued use depends on their performance. Verify that the admixtures will work as intended without detrimental effects. If at any point, a water-reducer is used to produce a slump equal to or greater than 7 ½ inches, comply with **subsection 401.3i.(4)**.

(4) Plasticizer Admixture. A plasticizer is defined as an admixture that produces flowing concrete, without further addition of water, and/or retards the setting of concrete. Flowing concrete is defined as having a slump equal to or greater than 7 ½ inches.

Include a batching sequence in the concrete mix design. Consider the location of the concrete plant in relation to the job site, and identify when and at what location the plasticizer is added to the concrete mixture. Do not add water after the plasticizer is added to the concrete mixture.

Manufacturers of plasticizers may recommend mixing revolutions beyond the limits specified in **subsection 401.8**. If necessary, address the additional mixing revolutions in the concrete mix design. The Engineer may allow up to 60 additional revolutions when plasticizers are designated in the mix design.

Before the concrete mixture with a slump equal to or greater than 7 ½ inches is used on the project, conduct tests on at least 1 full trial batch of the concrete mix design to determine the adequacy of the dosage and the batching sequence of the plasticizer to obtain the desired properties. Determine the air content of the trial batch both before and after the addition of the plasticizer. Monitor the slump, air content, temperature and workability at regular intervals of the time period from when the plasticizer is added until the estimated time of completed placement. At the discretion of the Engineer, if all the

properties of the trial batch remain within the specified limits, the trial batch may be used in the project.

The Engineer will allow minor adjustments to the dose rate to compensate for environmental changes during placement without a new concrete mix design or trial batch.

i. Slump. Designate a slump for each concrete mix design that is within the limits in **TABLE 401-6**.

TABLE 401-6: ALLOWABLE CONCRETE SLUMP	
Concrete Use	<i>Maximum Allowable Slump (inches)</i>
Concrete Pavement	2 ½ ⁽¹⁾⁽²⁾
Concrete for Structures & Air-Entrained Concrete for Structures	That required for satisfactory placement of the respective parts of the structure. ⁽²⁾
Bridge Subdecks or Decks without Plasticizing Admixtures	3 ⁽²⁾
Concrete with Plasticizing Admixture for Structures, Bridge Subdecks or Decks, Air-Entrained Concrete with Plasticizing Admixture for Structures, & Concrete with Plasticizing Admixture for Prestressed Beams	7 ⁽³⁾
Concrete with Plasticizers for Drilled Shafts	(4)

⁽¹⁾If the Engineer approves, slumps in excess of 2 ½ inches are allowed for areas that are hand finished.

⁽²⁾If the designated slump is 3 inches or less, the tolerance is ±¾ inch, or limited by the maximum allowable slump for the individual type of construction. If the designated slump is greater than 3 inches (without plasticizing admixture), the tolerance is ±25% of the designated slump.

⁽³⁾If the Engineer approves the use of plasticizing admixture in the concrete, the tolerance from the designated slump is ±25% or ¾ inch, whichever is larger, limited by the maximum allowable slump for the individual type of construction. Maintain the required geometry.

⁽⁴⁾The target slump just prior to being pumped into the drilled shaft is 9 inches. If the slump is less than 8 inches, then redose the concrete as permitted in subsection 401.3i.

j. Field Blended Cement Concrete. When approved by the Engineer, the concrete mix design may include supplementary cementitious materials (SCM) such as fly ash or ground granulated blast furnace slag (GGBFS) from an approved source as a partial replacement for portland cement or blended hydraulic cement. Obtain the Engineer's approval before substituting SCMs for Type III cement. The approved source of SCM may not be changed during the project.

Supplementary materials may be inter-ground, plant blended or field blended. Supplementary materials can be combined with cement to create binary or ternary concrete mixes. Do not exceed allowable substitution rates noted in **TABLE 401-8**. Substitute 1 pound of SCM for 1 pound of cement.

TABLE 401-8: ALLOWABLE SUBSTITUTION RATE FOR SUPPLEMENTARY CEMENTITIOUS MATERIAL.	
Material	Substitution Rate*
Slag Modified	40% Maximum
C Fly Ash Modified	25% Maximum
F Ash Modified	25% Maximum
Silica Fume Modified	5% Max
Total Combined	50%

* Total Substitution Rate includes material in pre-blended cements.

Design field blended cement concrete meeting the applicable requirements for Volume of Permeable Voids, Surface Resistivity, or Rapid Chloride Permeability using the parameters described in **subsection 401.3b**.

Submit complete mix design data including proportions and sources of all mix ingredients, and the results of strength tests representing the mixes proposed for use. The strength data may come from previous KDOT project records or from a laboratory regularly inspected by Cement and Concrete Reference Laboratory (CCRL), and shall equal or exceed the strength requirements for the Grade specified in the Contract Documents. Perform compressive strength tests according to AASHTO T-22.

Provide the results of mortar expansion tests of ASTM C 1567 using the project's mix design concrete materials at their designated percentages. Provide a mix with a maximum expansion of 0.10 % at 16 days after casting.

Waive ASTM C 1567 testing when Silica Fume is used singly.

Provide the results to the Engineer at least 60 days before placement of concrete on the project.

k. High Early Strength Concrete. Design the high early strength concrete mix to comply with strength and time requirements specified in the Contract Documents. Unless otherwise specified, design high early strength concrete for pavement at a minimum of 1 of the Contractor's standard deviations above 2400 psi (cylinders) at 24 hours.

Submit complete mix design data including proportions and sources of all mix ingredients, and the results of time and strength tests representing the mixes proposed for use. The strength and time data may come from previous KDOT project records or from an independent laboratory, and shall equal or exceed the strength and time requirements listed in the Contract Documents.

401.4 MORTAR AND GROUT

a. General. Follow the proportioning requirements in **subsection 401.4b.** and **c.** for mortar and grout unless otherwise specified in the Contract Documents, including altering the proportions when a minimum strength is specified.

b. Mortar. Mortar is defined as a mixture of cementitious materials, fine aggregate and water, which may contain admixtures, and is typically used to minimize erosion between large stones or to bond masonry units.

Proportion mortar for laying stone for stone rip-rap, slope protection, stone ditch lining or pavement patching at 1 part of portland cement and 3 parts of fine aggregate by volume with sufficient water to make a workable and plastic mix.

Proportion mortar for laying brick, concrete blocks or stone masonry at ½ part masonry cement, ½ part portland cement and 3 parts fine aggregate, either commercially produced masonry sand or FA-M, by volume with sufficient water to make

a workable and plastic mix.

Do not use air-entraining agents in mortar for masonry work.

The Engineer may visually accept the sand used for mortar. The Engineer may visually accept any recognized brand of portland cement or masonry cement that is free of lumps.

c. Grout. Grout is defined as a mixture of cementitious materials with or without aggregate or admixtures to which sufficient water is added to produce a pouring or pumping consistency without segregation of the constituent materials and meeting the applicable specifications.

401.5 COMMERCIAL GRADE CONCRETE

If the Contract Documents allow the use of commercial grade concrete for designated items, then use a commercial grade mixture from a ready-mix plant approved by the Engineer.

The Engineer must approve the commercial grade concrete mixture. Approval of the commercial grade mixture is based on these conditions:

- All materials are those normally used for the production and sale of concrete in the vicinity of the project.
- The mixture produced is that normally used for the production and sale of concrete in the vicinity of the project.
- The mixture produced contains a minimum cementitious content of 6 sacks, 564 lbs, of cementitious per cubic yard of concrete.
- The water-cementitious ratio is as designated by the Engineer. The maximum water-cementitious ratio permitted may not exceed 0.55 pounds of water per pound of cementitious including free water in the aggregate.
- Type I, II, III, IP, IS, or IT cement may be used unless otherwise designated. Fly ash or GGBFS may be substituted for the required minimum cement content as specified in **subsection 401.3**. No additives other than air entraining agent will be allowed. The Contractor will not be required to furnish the results of strength tests when submitting mix design data to the Engineer.
- In lieu of the above, approved mix designs (including optimized) for all other grades of concrete, Grade 3.0 or above, are allowable for use as commercial grade concrete, at no additional cost to KDOT.

Exercise good engineering judgment in determining what equipment is used in proportioning, mixing, transporting, placing, consolidating and finishing the concrete.

Construct the items with the best current industry practices and techniques.

Before unloading at the site, provide a delivery ticket for each load of concrete containing the following information:

- Name and location of the plant.
- Time of batching concrete.
- Mix proportions of concrete (or a mix designation approved by the Engineer).
- Number of cubic yards of concrete batched.

Cure the various items placed, as shown in **DIVISION 700**.

The Engineer may test commercial grade concrete by molding sets of 3 cylinders. This is for informational purposes only. No slump or unit weight tests are required.

401.6 CERTIFIED CONCRETE

If KDOT inspection forces are not available on a temporary basis, the Engineer may authorize the use of concrete from approved concrete plants. Approval for this operation is based on certification of the plant and plant personnel, according to KDOT standards. KDOT's approval may be withdrawn any time that certification procedures are not followed.

The Engineer will not authorize the use of certified concrete for major structures such as bridges, RCB box bridges, RCB culverts, permanent main line and ramp pavement or other structurally, critical items.

Each load of certified concrete must be accompanied by a ticket listing mix proportions, time of batching and setting on revolution counter, total mixing revolutions and must be signed by certified plant personnel.

401.7 REQUIREMENTS FOR COMBINED MATERIALS

a. Measurements for Proportioning Materials.

(1) Cement. Measure cement as packed by the manufacturer. A sack of cement is considered as 0.04 cubic yards weighing 94 pounds net. Measure bulk cement by weight. In either case, the measurement must be accurate to within 0.5% throughout the range of use.

(2) Fly Ash. Fly ash proportioning and batching equipment is subject to the same controls as required for cement. Provide positive cut off with no leakage from the fly ash cut off valve. Fly ash may be weighed accumulatively with the cement or separately. If weighed accumulatively, weigh the cement first.

(3) Water. Measure the mixing water by weight or by volume. In either case, the measurement must be accurate to within 1% throughout the range of use.

(4) Aggregates. Measure the aggregates by weight. The measurement must be accurate to within 0.5% throughout the range of use.

(5) Admixtures. Measure liquid admixtures by weight or volume. If liquid admixtures are used in small quantities in proportion to the cement as in the case of air-entraining agents, use readily adjustable mechanical dispensing equipment capable of being set to deliver the required quantity and to cut off the flow automatically when this quantity is discharged. The measurement must be accurate to within 3% of the quantity required.

b. Testing of Aggregates.

(1) Production of On Grade Concrete Aggregate (OGCA). If OGCA is required, notify the Engineer in writing at least 2 weeks in advance of producing the aggregate. Include the source of the aggregate and the date production will begin. Failure to notify the Engineer, as required, may result in rejection of the aggregate for use as OGCA. Maintain separate stockpiles for OGCA at the quarry and at the batch site and identify them accordingly.

(2) Testing Aggregates at the Batch Site. Provide the Engineer with reasonable facilities at the batch site for obtaining samples of the aggregates. Provide adequate and safe laboratory facilities at the batch site allowing the Engineer to test the aggregates for compliance with the specified requirements.

KDOT will sample and test aggregates from each source to determine their compliance with specifications. Do not batch the concrete mixture until the Engineer has determined that the aggregates comply with the specifications. KDOT will conduct sampling at the batching site, and test samples according to the Sampling and Testing Frequency Chart in Part V. For QC/QA Contracts, establish testing intervals within the specified minimum frequency.

After initial testing is complete and the Engineer has determined that the aggregate process control is satisfactory, use the aggregates concurrently with sampling and testing as long as tests indicate compliance with specifications. When batching, sample the aggregates as near the point of batching as feasible. Sample from the stream as the storage bins or weigh hoppers are loaded. If samples can not be taken from the stream, take them from approved stockpiles, or use a template and sample from the conveyor belt. If test results indicate an aggregate does not comply with specifications, cease concrete production using that aggregate. Unless a tested and approved stockpile for that aggregate is available at the batch plant, do not use any additional aggregate from that source and specified grading until subsequent testing of that aggregate indicate compliance with specifications. When tests are completed and the Engineer is satisfied that process control is satisfactory, production of concrete using aggregates tested concurrently with production may resume.

c. Handling of Materials.

(1) Approved stockpiles are permitted only at the batch plant and only for small concrete placements or for maintaining concrete production. Mark the approved stockpile with an "Approved Materials" sign. Provide a suitable stockpile area at the batch plant so that aggregates are stored without detrimental segregation or contamination. At the plant, limit stockpiles of tested and approved coarse aggregate and fine aggregate to 250 tons each, unless approved for more by the Engineer. If mixed aggregate is used, limit the approved stockpile to 500 tons, the size of each being proportional to the amount of each aggregate to be used in the mix.

Load aggregates into the mixer such that no material foreign to the concrete or material capable of changing the desired proportions is included. When 2 or more sizes or types of coarse or fine aggregates are used on the same project, only 1 size or type of each aggregate may be used for any one continuous concrete placement.

(2) Segregation. Do not use segregated aggregates. Previously segregated materials may be thoroughly re-mixed and used when representative samples taken anywhere in the stockpile indicated a uniform gradation exists.

(3) Cement, Fly Ash and GGBFS. Protect cement, fly ash and GGBFS in storage or stockpiled on the site from any damage by climatic conditions which would change the characteristics or usability of the material.

(4) Moisture. Provide aggregate with a moisture content of $\pm 0.5\%$ from the average of that day. If the moisture content in the aggregate varies by more than the above tolerance, take whatever corrective measures are necessary to bring the moisture to a constant and uniform consistency before placing concrete. This may be accomplished by handling or manipulating the stockpiles to reduce the moisture content, or by adding moisture to the stockpiles in a manner producing uniform moisture content through all portions of the stockpile.

For plants equipped with an approved accurate moisture-determining device capable of determining the free moisture in the aggregates, and provisions made for batch to batch correction of the amount of water and the weight of aggregates added, the requirements relative to manipulating the stockpiles for moisture control will be waived. Any procedure used will not relieve the producer of the responsibility for delivering concrete of uniform slump within the limits specified.

(5) Separation of Materials in Tested and Approved Stockpiles. Only use KDOT Approved Materials. Provide separate means for storing materials approved by KDOT. If the producer elects to use KDOT Approved Materials for non-KDOT work, during the progress of a project requiring KDOT Approved Materials, inform the Engineer and agree to pay all costs for additional materials testing.

Clean all conveyors, bins and hoppers of any unapproved materials before beginning the manufacture of concrete for KDOT work.

401.8 MIXING, DELIVERY AND PLACEMENT LIMITATIONS

a. Concrete Batching, Mixing and Delivery. Batch and mix the concrete in a central mix plant, in a truck mixer or in a drum mixer at the work site. Provide plant capacity and delivery capacity sufficient to maintain continuous delivery at the rate required. The delivery rate of concrete during concreting operations must provide for the proper handling, placing and finishing of the concrete.

Seek the Engineer's approval of the concrete plant/batch site by the Engineer before any concrete is produced for the project. The Engineer will inspect the equipment, the method of storing and handling of materials, the production procedures and the transportation and rate of delivery of concrete from the plant to the point of use. The Engineer will grant approval of the concrete plant/batch site based on compliance with the specified requirements. The Engineer may, at any time, rescind permission to use concrete from a previously approved concrete plant/batch site upon failure to comply with the specified requirements.

Clean the mixing drum before it is charged with the concrete mixture. Charge the batch into the mixing drum such that a portion of the water is in the drum before the aggregates and cementitious. Uniformly flow materials into the drum throughout the batching operation. All mixing water must be in the drum by the end of the first 15 seconds of the mixing cycle. Keep the throat of the drum free of accumulations restricting the flow of materials into the drum.

Do not exceed the rated capacity (cubic yards shown on the manufacturer's plate on the mixer) of the mixer when batching the concrete. The Engineer may allow an overload of up to 10% above the rated capacity for central mix plants and drum mixers at the work site, provided the concrete test data for strength, segregation and uniform consistency are satisfactory, and no concrete is spilled during the mixing cycle.

Operate the mixing drum at the speed specified by the mixer's manufacturer (shown on the manufacturer's plate on the mixer).

Mixing time is measured from the time all materials, except water, are in the drum. If it is necessary to increase the mixing time to obtain the specified percent of air in air-entrained concrete, the Engineer will determine the mixing time.

If the concrete is mixed in a central mix plant or a drum mixer at the work site, mix the batch between 1 to 5 minutes at mixing speed. Do not exceed the maximum total 60 mixing revolutions. Mixing time begins after all materials, except water, are in the drum, and ends when the discharge chute opens. Transfer time in multiple drum mixers is included in mixing time. Mix time may be reduced for plants utilizing high performance mixing drums provided thoroughly mixed and uniform concrete is being produced with the proposed mix time. Performance of the plant must conform with Table A1.1 of ASTM C 94, Standard Specification for Ready Mixed Concrete. Five of the 6 tests listed in Table A1.1 must be within the limits of the specification to indicate that uniform concrete is being produced.

If the concrete is mixed in a truck mixer, mix the batch between 70 and 100 revolutions of the drum or blades at mixing speed. After the mixing is completed, set the truck mixer drum at agitating speed. Unless the mixing unit is equipped with an accurate device indicating and controlling the number of revolutions at mixing speed, perform the mixing at the batch plant and operate the mixing unit at agitating speed while travelling from the plant to the work site. Do not exceed 300 total revolutions (mixing and agitating).

If a truck mixer or truck agitator is used to transport concrete that was completely mixed in a stationary central mixer, agitate the concrete while transporting at the

agitating speed specified by the manufacturer of the equipment (shown on the manufacturer's plate on the equipment). Do not exceed 200 total revolutions (additional re-mixing and agitating).

Provide a batch slip including batch weights of every constituent of the concrete and time for each batch of concrete delivered at the work site, issued at the batching plant that bears the time of charging of the mixer drum with cementitious and aggregates. Include quantities, type, product name and manufacturer of all admixtures on the batch ticket.

On paving projects and other high volume work, the Engineer will determine the haul time, and whether tickets will be required for every load. Thereafter, random checks of the loads will be made.

When non-agitating equipment is used for transportation of concrete, provide approved covers for protection against the weather when required by the Engineer.

Place non-agitated concrete within 30 minutes of adding the cement to the water.

Place concrete within the time and temperature conditions shown in

TABLE 401-9.

TABLE 401-9: AMBIENT AIR TEMPERATURE AND AGITATED CONCRETE PLACEMENT TIME		
T = Ambient Air Temperature at Time of Batching (°F)	Specimen Age Time limit agitated concrete must be placed within, after the addition of cement to water (hours)	Admixtures
T < 75	1 ½	None
75 ≤ T	1	None
75 ≤ T < 90	1 ½	Set Retarder

In all cases, if the concrete temperature at time of placement is 90°F or above, or under conditions contributing to quick stiffening of the concrete, place the concrete within 45 minutes of adding the cement to the water. Do not use concrete that has developed its initial set. Regardless of the speed of delivery and placement, the Engineer will suspend the concreting operations until corrective measures are taken, if there is evidence that the concrete can not be adequately consolidated.

Weather conditions and the use of admixtures can effect the set times for the concrete. Do not use the time limits and total revolutions as the sole criterion for rejection of concrete. Exceed the time limits and total revolutions only after demonstrating that the properties of the concrete can be improved. Evaluation of the consistency and workability should be taken into consideration. However, concrete that cannot be adequately consolidated should be rejected.

Adding water to concrete after the initial mixing is prohibited, with this exception: If the concrete is delivered to the work site in a truck mixer, the Engineer will allow water (up to 2 gallons per cubic yard) be withheld from the mixture at the batch site, and if needed, added at the work site to adjust the slump to the specified requirements. Determine the need for additional water as soon as the load arrives at the construction site. Use a calibrated water-measuring device to add the water, and add the water to the entire load. Do not add more water than was withheld at the batch site. After the additional water is added, turn the drum or blades an additional 20 to 30 revolutions at mixing speed. The Engineer will supervise the adding of water to the load, and will allow this procedure only once per load.

b. Placement Limitations.

(1) Placing Concrete at Night. Do not mix, place or finish concrete without sufficient natural light, unless an adequate, artificial lighting system approved by the Engineer is provided.

(2) Placing Concrete in Cold Weather. Unless authorized by the Engineer, discontinue mixing and concreting operations when the descending ambient air temperature reaches 40°F. Do not begin concreting operations until an ascending ambient air temperature reaches 35°F and is expected to exceed 40°F.

If the Engineer permits placing concrete during cold weather, aggregates may be heated by either steam or dry heat system before placing them in the mixer. Use an apparatus that heats the mass uniformly and is so arranged as to preclude the possible occurrence of overheated areas which might injure the materials. Do not heat aggregates directly by gas or oil flame or on sheet metal over fire. Aggregates that are heated in bins, by steam-coil or water-coil heating, or by other methods not detrimental to the aggregates may be used. The use of live steam on or through binned aggregates is prohibited. Unless otherwise authorized, maintain the temperature of the mixed concrete between 50 to 90°F at the time of placing. Do not, under any circumstances, continue concrete operations if the ambient air temperature is less than 20°F.

If the ambient air temperature is 35°F or less at the time the concrete is placed, the Engineer may require that the water and the aggregates be heated to between 70 and 150°F.

Do not place concrete on frozen subgrade or use frozen aggregates in the concrete.

As a general rule, do not use fly ash, GGBFS or blended cement between the dates of October 1 and April 1. However, if weather conditions are unseasonably warm, the Engineer may waive this rule on a day by day basis. The Engineer will consider the nighttime temperatures, the extended weather forecast and the performance and setting of the mix when deciding whether to waive the restrictions.

401.9 INSPECTION AND TESTING

Unless otherwise designated in the Contract Documents or by the Engineer, obtain samples of fresh concrete for the determination of slump, weight per cubic yard and percent of air from the final point of placement.

The Engineer will cast, store and test strength test specimens in sets of 3.

KDOT will conduct the sampling and test the samples according to **DIVISION 2500** and the Sampling and Testing Frequency Chart in Part V. For QC/QA Contracts, establish testing intervals within the specified minimum frequency.

The Engineer will reject concrete that does not comply with specified requirements.

The Engineer will permit occasional deviations below the specified cementitious content, if it is due to the air content of the concrete exceeding the designated air content, but only up to the maximum tolerance in the air content.

The Contractor has the option to control air content for PCCP by either the Non QC/QA Approach or the QC/QA Approach (see **subsection 401.10** or **401.11**, the Contractor's Quality Control Plan for PCCP shall designate which approach will be used). Continuous operation below the specified cementitious content for any reason is prohibited.

As the work progresses, the Engineer reserves the right to require the Contractor to change the proportions if conditions warrant such changes to produce a satisfactory mix. Any such changes may be made within the limits of the specifications at no additional compensation to the Contractor.

401.10 AIR-ENTRAINED CONCRETE PAVEMENT (NON-QC/QA APPROACH)

a. Air Content for PCCP. Provide an air content that complies with **subsection 401.3 h.**

Using fresh concrete, the Engineer will determine the air void spacing factor using the AVA according to the manufacturer's requirements. Prequalify mixtures by either the laboratory option or the field option. Contact the Engineer to arrange testing by the AVA.

b. Laboratory Prequalification. Prepare a trial mix using a drum-type mixer according to AASHTO T 126 using all of the materials in the proportions, except the air entraining agent, contemplated for use in the field. Laboratory mixes require more air entraining agent than is needed in the field. Consolidate a sample in the unit weight bucket by vibration according to KT-20. Obtain 3 samples from the unit weight bucket for testing by the AVA. Valid results must have a minimum of 2 spacing factor readings within a range of 0.0025 inch. Test the third sample if the first two do not meet this criteria. Determine the air content of the trial mix by KT-19 (Roll-a-meter) or KT-18 (pressure meter) calibrated to yield the same result. Calculate a target percent air content at a maximum air void spacing factor of 0.01 inch using the equation in **subsection 401.3h.**, when applicable.

c. Field Prequalification. Previous data on air content and air void spacing factors may be submitted as a basis of prequalification for a mixture if the same materials, proportions, equipment and procedures are used. The only exception allowed is a change in coarse aggregate sources if the gradation is similar. The new aggregate source is required to meet the same qualifications as the previous aggregate source. Alternately, produce a trial batch at a minimum air temperature of 60°F using the batch plant and project materials. Test for air content by the procedure specified under laboratory prequalification. Correlate this air content to the average of at least 2 valid AVA test results. Valid AVA results have a maximum range of 0.0025 inch.

When necessary, calculate a target percent air content at a maximum air void spacing factor of 0.01 inch, using the equation in **subsection 401.3h.**

d. Field Verification. Coordinate with the Engineer so production samples may be obtained behind the paver to establish the target air content on the first paving day. Produce concrete using the same materials and proportions that were used in the prequalification mixture. Adjustments may be approved in the dosage of air entraining agent and a 5% adjustment may be approved in the water-cementitious ratio. Samples will be taken both in the path of a vibrator and the gap between vibrators. Perform the test for air content at the delivery site of the concrete KT-19 (Roll-a-meter) or KT-18 (pressure meter), calibrated to yield the same result. Make adjustments in the proportions, types of material or the operation to establish a satisfactory, target air content.

e. Control of the Air Content During Paving Operations. Maintain an air content behind the paver as determined by KT-19 or KT-18, which meets **subsection 401.3h.** Maintain all production parameters established during field verification. The dosage of air-entraining agent may be varied to control the air content. Five percent adjustments will be permitted to the cementitious content and the water-cementitious ratio. With AVA testing, 5% adjustments will be permitted to the aggregate proportions, as well as any adjustment to the water reducer. Comply with all specifications regarding production of fresh concrete. For all mainline paving, test the concrete at the beginning of the day's operation and approximately every 2 hours thereafter for air content. For all

other slipformed pavement, test for air content at the beginning of a day's operation and approximately every 4 hours thereafter. Test hand placements for air content at least once daily.

Determine the air loss due to paving operations once in the AM and once in the PM. Determine the difference between the air content from concrete sampled before the paver, and concrete sampled behind the paver. QC/QA samples may be obtained in front of the paver and then corrected subtracting the difference determined during that ½ days production. Loss of air due to paving operations may adversely affect the spacing factor.

Failure to maintain the minimum required air content will result in suspension of operation. Take immediate steps to increase the air content above the minimum values stated in **subsection 401.3h**.

Other similar designs using higher cementitious contents and the same admixture types and dosage (with the same or lower water-cementitious ratio) may be used in limited areas such as crossovers, etc. Unauthorized changes in any aspect of production are cause for rejection of the pavement.

Random checks of the air void spacing factor of the concrete in the path and gap of the vibrators will be conducted by the Engineer to verify a maximum spacing factor of 0.01 inch at the measured air content.

05-16-14 C&M

Aug-14 Letting

APPENDIX A - Non-Mandatory Information

a. Concrete for Structures. Design field blended cement concrete meeting the applicable requirements for Volume of Permeable Voids, Surface Resistivity, or Rapid Chloride Permeability using the parameters described in **subsection 401.3b**.

TABLE 401-A1: CONCRETE FOR STRUCTURES		
Grade of Concrete: Type of Aggregate (DIVISION 1100)	lb. of Cementitious per yd ³ of Concrete, minimum	lb. of Water per lb. of Cementitious, maximum ¹
Grade 5.0:		
Mixed aggregate with 30% or more (by weight) on the No. 4 sieve	639	0.36
Coarse and Fine Aggregate	602	0.36
MA-2 with 45% or more (by weight) on the No. 4 sieve	602	0.36
Grade 4.5:		
Mixed aggregate with less than 30% (by weight) on the No. 4 sieve	696	0.42
Mixed aggregate with 30% or more (by weight) on the No. 4 sieve	639	0.42
Coarse and Fine Aggregate	602	0.42
MA-2 with 45% or more (by weight) on the No. 4 sieve	602	0.42
Grade 4.0²:		
Mixed aggregate with less than 30% (by weight) on the No. 4 sieve	696	0.46
Mixed aggregate with 30% or more (by weight) on the No. 4 sieve	639	0.46
Coarse and Fine Aggregate	602	0.46
MA-2 with 45% or more (by weight) on the No. 4 sieve	602	0.46
Grade 3.0 and Grade 3.5:		
Mixed aggregate with less than 30% (by weight) on the No. 4 sieve	639	0.48
Mixed aggregate with 30% or more (by weight) on the No. 4 sieve	602	0.48
Coarse and Fine Aggregate	564	0.48
MA-2 with 45% or more (by weight) on the No. 4 sieve	564	0.48
Grade 2.5:		
All Aggregates	526	0.55

¹Maximum limit of lb. of water per lb. of cementitious includes free water in aggregates, but excludes water of absorption of the aggregates.

²Take measures to control bleeding on Grade 4.0 concrete for drilled shafts through the use of a lower w/c ratio, the addition of air, or any other proven method to control bleeding.

b. Air-Entrained Concrete for Structures. Design air-entrained concrete for structures meeting the applicable requirements for Volume of Permeable Voids, Surface Resistivity, or Rapid Chloride Permeability, according to **TABLE 401-A2**.

TABLE 401-A2: AIR-ENTRAINED CONCRETE FOR STRUCTURES			
Grade of Concrete Type of Aggregate (DIVISION 1100)	lb. of Cementitious per yd ³ of Concrete , minimu m	lb. of Water per lb. of Cementi tious, maximu m ⁵	Perce nt of Air by Volum e ⁶
Grade 6.0(AE)(SA) ²:			
Mixed aggregate with 30% or more (by weight) on the No. 4 sieve	752	0.35	6.5±1.5
Coarse and Fine Aggregate	752	0.35	6.5±1.5
MA-2 with 45% or more (by weight) on the No. 4 sieve	700	0.35	6.5±1.5
Grade 5.0(AE), Grade 5.0(AE)(SW) ¹, Grade 5.0(AE)(SA) ², Grade 5.0(AE)(AI) ³ and Grade 5.0(AE)(PB) ⁴:			
Mixed aggregate with 30% or more (by weight) on the No. 4 sieve	639	0.35	6.5±1.5
Coarse and Fine Aggregate	602	0.35	6.5±1.5
MA-2 with 45% or more (by weight) on the No. 4 sieve	602	0.35	6.5±1.5
Grade 4.5(AE), Grade 4.5(AE)(SW) ¹, Grade 4.5(AE)(SA) ², and Grade 4.5(AE)(AI) ³:			
Mixed aggregate with less than 30% (by weight) on the No. 4 sieve	696	0.40	6.5±1.5
Mixed aggregate with 30% or more (by weight) on the No. 4 sieve	639	0.40	6.5±1.5
Coarse and Fine Aggregate	602	0.40	6.5±1.5
MA-2 with 45% or more (by weight) on the No. 4 sieve	602	0.40	6.5±1.5
Grade 4.0(AE), Grade 4.0(AE)(SW) ¹, Grade 4.0(AE)(SA) ², and Grade 4.0(AE)(AI) ³:			
Mixed aggregate with less than 30% (by weight) on the No. 4 sieve	696	0.44	6.5±1.5
Mixed aggregate with 30% or more (by weight) on the No. 4 sieve	639	0.44	6.5±1.5

Coarse and Fine Aggregate	602	0.44	6.5±1.5
MA-2 with 45% or more (by weight) on the No. 4 sieve	602	0.44	6.5±1.5
Grade 3.0(AE) and Grade 3.5(AE):			
Mixed aggregate with less than 30% (by weight) on the No. 4 sieve	639	0.46	6.5±1.5
Mixed aggregate with 30% or more (by weight) on the No. 4 sieve	602	0.46	6.5±1.5
Coarse and Fine Aggregate	564	0.46	6.5±1.5
MA-2 with 45% or more (by weight) on the No. 4 sieve	564	0.46	6.5±1.5
Grade 2.5(AE):			
All Aggregates	526	0.53	6.5±1.5

¹Grade xx (AE)(SW) - Structural concrete with select coarse aggregate for wear.

²Grade xx (AE)(SA) - Structural concrete with select coarse aggregate for wear and absorption.

³Grade xx (AE)(AI) - Structural concrete with select coarse aggregate for wear and acid insolubility.

⁴Grade xx (AE)(PB) - Structural concrete with select aggregate for use in prestressed concrete beams.

⁵Maximum limit of lb. of water per lb. of cementitious includes free water in aggregates, but excludes water of absorption of the aggregates.

⁶The maximum air content is 10%. Take immediate steps to get the air down whenever the air content exceeds 8%.

c. Silica Fume Modified Concrete. When silica fume is specified in the Contract Documents, meet the mix design and production requirements in **TABLE 401-A3**.

TABLE 401-A3: SILICA FUME CONCRETE CRITERIA	
lbs. of Cement per cu. yd. maximum	595
lbs. of Silica Fume per cu. yd., maximum	30
lbs. of water per lbs. of (Cement + Silica Fume), Max	0.40
Percent of Air by Volume	6.5±1.5 ¹
Maximum 56 day Rapid Chloride Permeability AASHTO T-277 ²	1000 coulombs
or Maximum 28 day Permeable Voids KT-73 ²	9.50%
or Minimum 28 day Surface Resistivity KT-79 ²	27.0 kΩ-cm

¹As Determined by KT-19 (Rollometer). A regularly calibrated air meter may be used for production with random verification by the rollometer. See KT-19 for special requirements when using the rollometer with high cement concretes or mixtures with midrange water reducers or plasticizers.

²Provide Silica Fume Modified Concrete with either a maximum 28-day Volume of Permeable Voids of 9.5% as per KT-73, a minimum 28-day Surface Resistivity of 27.0 kΩ-cm as per KT-79, or a maximum 56-day Rapid Chloride Permeability of 1000 Coulombs as per AASHTO T-277. Submit accelerated cure procedures for the Engineer's approval.

APPENDIX B - Non-Mandatory Information

Suggested Guidelines for Meeting KDOT's Permeability Specifications

General

Water and chlorides permeate through the mortar and paste of the concrete mixes. They do not readily permeate through the larger aggregates. Permeability can be improved by decreasing the mortar and paste of the concrete mix and increasing the coarse aggregate portions.

The use of optimized mix designs, blended cements, and/or supplementary cementitious materials (SCMs) can reduce the permeability of concrete. The latest revisions of **SECTION 1102**, Aggregates for Concrete describes optimized aggregate gradations for concrete mixes. Additional testing for alkali silica reaction (ASR) is required when SCMs are used in concrete as per the latest revision of **SECTION 401**. The amount of SCMs required to pass the ASR testing may be different than the amount required to comply with the permeability specifications. SCMs may also lower the necessary water cement (w/c) ratio and may slow set times and strength gain.

Optimizing the coarse aggregate gradations can decrease permeability. This includes mixes with more than 60% retained on the # 8 sieve and gradations with fineness modulus above 4.75. A fineness modulus of over 5.0 can yield even better results. Use the largest practical nominal maximum size aggregate allowed.

In general, keeping the w/c ratio below 0.43 may help meet the permeability specifications, as may lower cementitious content mixes when using Type I/II cements. These two properties control the paste in the mix. Concrete mixes with less than 25% paste (as displayed on KDOT Form 694) are more likely to pass the permeability specifications. Acceptable concrete can be mixed with paste contents of 23% or lower. Water cement ratios below 0.39 often do not provide enough water for all constituents to properly react, especially when admixtures are used, and may be counterproductive. High early strength concrete mixes using Type III cement and higher cementitious contents have also been able to pass the Standard Permeability requirements because of their low w/c ratios.

In general, the use of water reducers is helpful in reducing the paste content. Material compatibilities, following the admixture suppliers' recommendations for dosage rates, and the order of introduction of the chemicals into the mix are paramount to meeting KDOT specifications. Contractors should work with their admixture suppliers to find an admixture that works well with their combination of materials.

Changes made to an approved mix design will change the permeability, especially additional water, or redosing water that was withheld from the mix at a concrete plant. It is also recommended that concrete producers verify their mixes with a minimum of 3 cubic yards after doing their laboratory mix designs.

Standard Permeability Concrete (SPC)

Requirements:

Volume of Permeable Voids 12.0% max, or
Surface Resistivity 9.0 kΩ-cm min, or
RCPT 3000 Coulombs max.

The SPC specification may be met without the use of optimized mix designs, blended cements, or SCMs. With certain aggregates, 25% slag cement will be required to pass the ASR testing. With other aggregates, a minimum of 30% slag cement by weight of total cementitious materials is usually needed. Some fly ashes require a minimum of 18% to 20% of the total cementitious material to pass the ASR test. Class C fly ash will react differently than Class F fly ash.

Some people believe that lower absorption aggregates have a better chance of meeting the permeability specification, but higher absorption aggregates have been used in concrete mixes utilizing these guidelines and have met the SPC specifications. KDOT has found that the properties of the concrete are often more important than the absorption of the aggregate when meeting this specification.

Moderate Permeability Concrete (MPC)

Requirements:

Volume of Permeable Voids 11.0% max, or
Surface Resistivity 13.0 k Ω -cm min, or
RCPT 2000 Coulombs max.

Concrete mixes for MPC will require aggregates with a minimum Soundness of 0.95, a maximum LA Wear of 40, and a minimum Acid Insoluble Residue of 85%. These aggregates, by nature, are harder aggregates with very low absorption. MPC may rely more heavily on optimized gradations, blended cements or SCMs in order to meet the specification. Consideration could be given to ternary blends of cementitious materials, using more than one SCM, or combining a blended cement with an additional SCM. Combinations of 25% to 30% slag cement with as little as 10% to 25% Class C fly ash have been very effective in keeping permeabilities below the level required for MPC. Incorporation of 20% Class F Fly Ash will often satisfy the requirements of the MPC specification.

Low Permeability Concrete

Requirements:

Volume of Permeable Voids 9.5% max, or
Surface Resistivity 27.0 k Ω -cm min, or
RCPT 1000 Coulombs max.

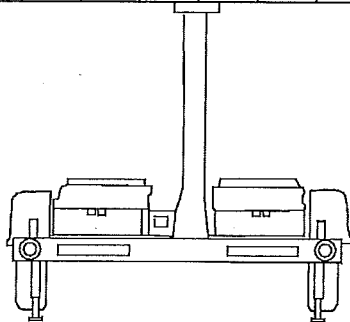
LPC will also use harder aggregates with very low absorption. These mixes must be optimized with the MA-6 gradation. Mix designs with 5% silica fume and 95% Type I/II cement often meet the LPC requirements. These mixes have traditionally been known as silica fume concrete. Ternary mix designs are useful in meeting these requirements: Consider using 3% to 5% silica fume with 25% to 30% slag cement, or 25% to 30% slag cements with 10% to 25% Class C fly ash. Class F fly ash alone may also be effective in reducing the permeability to these levels.

Contact KDOT's Bureau of Research or the District Office for additional guidance in meeting the Permeability Specifications.

CHANGEABLE MESSAGE SIGN DETAIL

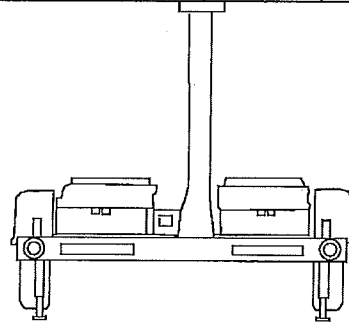
PHASE I WORDING

R	O	A	D				
C	L	O	S	E	D		



PHASE II WORDING

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D	A	T	E				

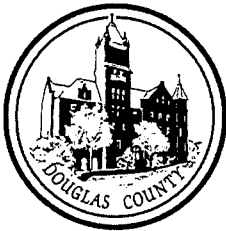


CHANGEABLE MESSAGE
INFORMATIONAL SIGN
QTY. 2 X 7 days = 14 EA.

*NOTES

Changeable Message Signs Shall be placed in accordance with Section 6F.60 of the 2009 Ed. MUTCD . Message Signs shall be displayed when construction is in progress.

Message Signs shall display information as directed by the engineer.



DOUGLAS COUNTY PUBLIC WORKS

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Keith A. Browning, P.E.
Director of Public Works/County Engineer

MEMORANDUM

To: Board of County Commissioners

From: Chad Voigt, P.E., Deputy Public Works Director *CV*

Date: February 5, 2016

Re Consider awarding construction contract for Project No. 2013-18
Deck replacement for Bridge No. 08.74N-07.95E
Route 1039 bridge over Washington Creek at Lone Star town

We opened bids on January 29th, 2016 for construction of the referenced project. The bid tabulation is attached. We received one bid from Bryan-Ohlmeier Construction for \$354,367.85. This is below the engineer's estimate of \$418,219.50. We recommend the BOCC award a construction contract to the low bidder, Bryan-Ohlmeier Construction. We also request authorization to approve construction change orders totaling up to 5% of the total contract amount.

The referenced bridge carries Route 1039 (E 800 Road) over Washington Creek just south of the community of Lone Star. The bridge is a 3-span, 136 feet long, steel bridge with concrete deck constructed in 1980. The concrete deck has been patched numerous times. The latest bridge inspection revealed approximately 60% of the deck is patched or delaminated, and the bottom of deck has several spalled areas with exposed reinforcing steel and some transverse cracks with leaching, a sign of moisture passing through cracks in the slab possibly leading to reinforcing steel deterioration. The current CIP allocates \$475,000 for this project.

Action required: Approval of a construction contract in the low-bid amount of \$354,367.85 with Bryan-Ohlmeier Construction for Project 2013-18, deck replacement for Bridge No. 08.74N-07.95E, and authorization for the Public Works Director to approve change orders totaling up to 5% of the total contract amount.

DOUGLAS COUNTY PUBLIC WORKS
PROJECT 2013-18/BID NO. 16-F-0001
DESCRIPTION: DECK REPLACEMENT FOR 08.74N-07.95E
BID TABULATION

ITEM NO.	BID ITEM	UNIT	QTY	ENGINEER'S ESTIMATE		Bryan-Ohlmeier Constr.					
				UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
1	REMOVAL OF EXISTING STRUCTURE	L.S.	1	\$35,000.00	\$35,000.00	\$22,000.00	\$22,000.00				
2	CLEARING & GRUBBING	L.S.	1	\$5,000.00	\$5,000.00	\$4,000.00	\$4,000.00				
3	ROCK EXCAVATION	C.Y.	47	\$30.00	\$1,410.00	\$25.00	\$1,175.00				
4	COMMON EXCAVATION (RURAL)	C.Y.	199	\$15.00	\$2,985.00	\$10.50	\$2,089.50				
5	COMMON EXCAVATION (CONTR. FURNISHED)	C.Y.	373	\$25.00	\$9,325.00	\$18.50	\$6,900.50				
6	COMPACTION OF EARTH WORK (TY A)(MR-5-5)	C.Y.	429	\$2.00	\$858.00	\$3.15	\$1,351.35				
7	CONCRETE PAVEMENT (10" UNIFORM) (AE)	S.Y.	89.2	\$235.00	\$20,962.00	\$195.00	\$17,394.00				
8	MANHOLE (PRECAST)	EA.	1	\$6,100.00	\$6,100.00	\$3,675.00	\$3,675.00				
9	ENTRANCE PIPE (24") (RCP)	L.F.	31	\$95.00	\$2,945.00	\$54.50	\$1,689.50				
10	END SECTION (24") (RC)	EA.	1	\$975.00	\$975.00	\$1,130.00	\$1,130.00				
11	GUARD FENCE, STEEL PLATE	L.F.	162.5	\$65.00	\$10,562.50	\$72.00	\$11,700.00				
12	GUARD FENCE END TERMINAL (SRT)	EA.	3	\$2,650.00	\$7,950.00	\$2,300.00	\$6,900.00				
13	FIELD OFFICE & LAB (TYPE B)	L.S.	1	\$3,500.00	\$3,500.00	\$2,500.00	\$2,500.00				
14	MOBILIZATION	L.S.	1	\$40,000.00	\$40,000.00	\$26,500.00	\$26,500.00				
15	CONTRACTOR CONSTRUCTION STAKING	L.S.	1	\$7,000.00	\$7,000.00	\$2,625.00	\$2,625.00				
16	OBJECT MARKERS (TYPE III)	EA.	4	\$125.00	\$500.00	\$150.00	\$600.00				
17	TRAFFIC CONTROL	L.S.	1	\$4,000.00	\$4,000.00	\$4,500.00	\$4,500.00				
18	HMA - COMMERCIAL GR. (CL A)(SURFACE)	TON	36	\$100.00	\$3,600.00	\$110.00	\$3,960.00				
19	HMA - COMMERCIAL GR. (CL A)(BASE)	TON	124	\$100.00	\$12,400.00	\$110.00	\$13,640.00				
20	HMA- COMMERCIAL GR. (CL A)(PATCHING)	TON	25	\$200.00	\$5,000.00	\$145.00	\$3,625.00				
21	AGGREGATE SURFACING (AB-3)	TON	229	\$42.00	\$9,618.00	\$28.00	\$6,412.00				
22	TEMPORARY SEEDING	L.S.	1	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00				
23	SILT FENCE	L.F.	450	\$5.00	\$2,250.00	\$5.00	\$2,250.00				
24	BIODEGRADABLE LOG (9")	L.F.	225	\$5.00	\$1,125.00	\$6.50	\$1,462.50				
25	BIODEGRADABLE LOG (12")	L.F.	225	\$5.50	\$1,237.50	\$7.50	\$1,687.50				
26	BIODEGRADABLE LOG (18"-20")	L.F.	250	\$7.00	\$1,750.00	\$10.00	\$2,500.00				
27	TEMPORARY DITCH CHECK (ROCK)	C.Y.	24	\$65.00	\$1,560.00	\$65.00	\$1,560.00				
28	MULCH TACKING SLURRY	LBS.	300	\$1.00	\$300.00	\$5.00	\$1,500.00				
29	MULCH (TEMPORARY)	TON	0.7	\$250.00	\$175.00	\$525.00	\$367.50				
30	CLASS III EXCAVATION	C.Y.	116	\$85.00	\$9,860.00	\$45.00	\$5,220.00				
31	CONCRETE GRADE 4.0 (AE) (SA)	C.Y.	135.1	\$675.00	\$91,192.50	\$625.00	\$84,437.50				
32	REINFORCING STEEL (GR 60) (EPOXY)	LBS.	45,830	\$1.20	\$54,996.00	\$1.10	\$50,413.00				

DOUGLAS COUNTY PUBLIC WORKS
PROJECT 2013-18/BID NO. 16-F-0001
DESCRIPTION: DECK REPLACEMENT FOR 08.74N-07.95E
BID TABULATION (Page Two)

ITEM NO.	BID ITEM	UNIT	QTY	ENGINEER'S ESTIMATE		Bryan-Ohlmeier Constr.					
				UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
33	REINFORCING STEEL (GR 60)(REPAIR)(EPOXY)(SET)	LBS.	1	\$3.00	\$3.00	\$3.00	\$3.00				
34	DRILLING & GROUTING	EA.	148	\$35.00	\$5,180.00	\$25.00	\$3,700.00				
35	WELDED STUD SHEAR CONNECTORS	EA.	2,760	\$15.00	\$41,400.00	\$15.00	\$41,400.00				
36	BRIDGE PAINTING	L.S.	1	\$12,500.00	\$12,500.00	\$8,500.00	\$8,500.00				
TOTAL BID -					\$418,219.50		\$354,367.85				

Keith A. Browning, PE, Director of Public Works

Date

Jaime Shew, Douglas County Clerk

6

DOUGLAS COUNTY, KANSAS
OFFICE OF THE COUNTY ENGINEER
SPECIFICATIONS AND CONTRACT DOCUMENTS
FOR
DOUGLAS COUNTY PROJECT NO. 2013-18

DECK REPLACEMENT FOR
BRIDGE NO. 08.74N – 07.95E

BID # 16-F-0001

Douglas County Commissioners

James E. Flory, Chairman

Mike Gaughan, Member

Nancy Thellman, Member

Approved By:

Keith A. Browning, P.E.
Director of Public Works
and County Engineer

Date: 1/6/2016

DOUGLAS COUNTY, KANSAS
PROJECT NO. 2013-18
BID # 16-F-0001

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DOUGLAS COUNTY, KANSAS
PROJECT NO. 2013-18
BID # 16-F-0001
NOTICE TO CONTRACTORS

Notice is hereby given that sealed proposals for the performance of the contract above noted will be received in the Office of the Douglas County Clerk until 3:00 P.M., Friday, January 29, 2016, and then publicly opened in the Courthouse, 1100 Massachusetts Street, Lawrence, Kansas.

Douglas County Project 2013-18 consists of the bridge deck removal and replacement, removal and replacement of structural steel, concrete approach slabs, grading, bituminous patching, base, and surfacing, seeding, guardrail installation and traffic control. This bridge is located over the Washington Creek in Lone Star, KS on Douglas County Route 1039.

All bids must be submitted on forms obtainable at the Office of the Director of Public Works/County Engineer, 3755 E 25th Street, Lawrence, Kansas 66046 or Demand Star @ www.demandstar.com, and are open for public inspection. Proposals shall be submitted in sealed envelopes, addressed to the Office of the County Clerk, Courthouse, 1100 Massachusetts, Lawrence, Kansas 66044, upon which is clearly written or printed "Proposal for Douglas County Project No. 2013-18", and the name and address of the bidder. Any bids received after the closing time will be returned unopened.

Copies of the Contract Documents and Specifications are available from the Office of the Director of Public Works and County Engineer of Douglas County, Kansas. A Fifty Dollar (\$50.00) non-refundable deposit is required per set, which includes one "11 x 17" set of plans and a copy of the contract documents and specifications. The contract documents, specifications, and plans become the property of the prospective bidder and are not returnable. Copies of the contract documents, specifications, and plans are on file and open for public inspection at the Office of the County Engineer.

All bids must be accompanied by a CERTIFIED CHECK, CASHIER'S CHECK or a BID BOND for not less than Five Percent (5%) of the base bid as a guarantee that if awarded the Contract, the bidder will enter into a Contract and give bond as required. Said check or bond shall be made payable to the Board of County Commissioners, Douglas County, Kansas.

Contracts will be awarded only to such bidders as are on the list of Pre-Qualified Contractors for the Kansas Department of Transportation on the date established for receiving and opening of bids.

The Board of County Commissioners of Douglas County, Kansas reserve the right to reject any or all bids and to waive technicalities, and to award the contract to the bidder that the Commission deems best suited to accomplish the work.

DOUGLAS COUNTY PUBLIC WORKS
Keith A. Browning, P.E.
Director of Public Works
Date: 1/6/2016

Publication Date: Friday, January 8, 2016
Saturday, January 16, 2016

cc: Lawrence Journal World
Douglas County Commission
Public Works Accounting
Douglas County Clerk

Douglas County Administrator
Douglas County Purchasing
Douglas County Shop

DOUGLAS COUNTY, KANSAS
PROJECT NO. 2013-18
BID # 16-F-0001

INFORMATION FOR BIDDERS

1. Proposals must be submitted on duly executed copy of the Proposal Forms obtained at the Office of the Director of Public Works, 3755 E 25th Street, Lawrence, Kansas 66046 or Demand Star.
2. Proposals must be in sealed envelopes, addressed to the Office of the County Clerk, Courthouse, Lawrence, Kansas, upon which is clearly written, or printed, "Proposal for Douglas County Project No. 2013-18" and the name and address of the bidder.
3. Each bidder shall state in his Proposal, his name, place of residence and his exact post office address, and the names and addresses of all persons or parties interested with him therein. Anyone signing a Proposal as an agent for another must file, with the Proposal, acceptable evidence of his authority to do so.
4. Each bidder is required to deposit with his Proposal a Certified Check, Cashier's Check or Bid Bond in the amount of five percent (5%) of the base bid. The above required deposit will serve as a guarantee that the bidder will file all bonds required and enter into the Contract, should it be awarded to him, according to the terms of his bid, within twenty-one (21) days after the certification of the award. Should the Contractor fail to file approved surety bonds or enter into Contract with Douglas County, Kansas, the bid security shall be forfeited as liquidated damages, and the money realized therefrom turned into the County Treasury.
5. Contracts will be let only to such bidders as are on the list of Pre-Qualified Contractors for the Kansas Department of Transportation on the date established for receiving and opening of bids.
6. Bidders must show their unit prices, make extensions based on the unit price bid for each item and total the bid for all items.
7. In the event any discrepancy occurs between the unit prices and the gross sum bid, the unit price shall apply.
8. Proposals must be signed.
9. Failure to comply with one or all of the above stated requirements will be considered sufficient grounds for rejection of the Proposal.
10. The winning bidder shall, within twenty-one (21) days of the Award of the Contract, file an approved Statutory Bond and an approved Performance and Maintenance Bond in an amount equal to the total bid.

DOUGLAS COUNTY, KANSAS
PROJECT NO. 2013-18
BID # 16-F-0001

SPECIFICATIONS

THE STANDARD SPECIFICATIONS FOR STATE ROAD AND BRIDGE CONSTRUCTION OF THE KANSAS DEPARTMENT OF TRANSPORTATION, EDITION OF 2007, shall be the Specifications for this Contract except the Sections and Articles which shall be deleted from the STANDARD SPECIFICATIONS and shall be revised as hereinafter shown.

DIVISION 100

GENERAL CLAUSES AND COVENANTS

Section 101.3

DEFINITIONS

BID BOND – DELETE item and ADD – The approved form of security, executed by the bidder and his surety or sureties, guaranteeing the execution of a satisfactory contract and the filing of an acceptable contract bond if the bidder's offer is accepted. The bid bond shall be a Certified Check, Cashier's Check or Bid Bond in the amount of five percent (5%) of the base bid. Said check or bond shall be made payable to the Board of County Commissioners, Douglas County, Kansas.

CONTRACT - DELETE item and ADD - The written agreement between the Board of County Commissioners of Douglas County, Kansas, and the Contractor setting forth the obligations of the parties thereunder, including, but not limited to, the performance of the work, the furnishing of labor and materials, and the basis of payment.

The Contract shall include the Contract Documents, which shall include the Proposal, Plans, Specifications, Contract Drawings, Supplemental Specifications, Special Provisions, Contract, Performance and Maintenance Bond, and the Statutory Bond, and also any change orders and agreements that are required to complete the construction of the work in an acceptable manner, including authorized extensions thereof, all of which constitute one instrument.

CONTRACT BOND - DELETE item and ADD - The Statutory Bond and the Performance and Maintenance Bond executed by the Contractor and his Surety, guaranteeing execution of the Contract and all Supplemental Agreements pertaining thereto and the payment of all legal debts pertaining to the construction of the Project.

DEPARTMENT - ADD - Douglas County, Kansas, represented by its Board of County Commissioners.

ENGINEER - DELETE item and ADD - Douglas County, Kansas, or the Director of Public Works of Douglas County, Kansas, acting directly or through his authorized representatives on behalf of Douglas County, Kansas.

LABORATORY - ADD - The testing laboratory designated by the Engineer.

SPECIFICATIONS (Continued)

RETAINAGE – ADD – From the grand total of the work completed as estimated by the Engineer, there shall be deducted five (5) percent to be retained by the County as required by KSA 68-1120 until full and satisfactory completion of the Contract, Specifications and Contract Documents and the Engineer shall certify the balance to the Commission for payment; except that no amount less than Five Hundred Dollars (\$500.00) will be paid unless the total amount of the Contract remaining unpaid is less than Five Hundred Dollars (\$500.00).

SECRETARY - DELETE item and ADD - COUNTY - Douglas County, Kansas, represented by its Board of County Commissioners.

STATE - DELETE item and ADD - COUNTY - Douglas County, Kansas represented by its Board of County Commissioners.

Section 102

BIDDING REQUIREMENTS AND CONDITIONS

102.1 CONSTRUCTION BULLETIN (ADVERTISEMENT), DELETE item and ADD – Douglas County will publish a Notice to Contractor's to notify prospective Contractors of a letting. This notice describes the contemplated work, informs the Contractor how to obtain Bidding Proposal Forms, identifies the location of plans and specifications, identifies the time and place for receiving bids, and reserves Douglas County's right to reject bids. All proposal blanks shall be obtained by prequalified bidders from the Office of the Director of Public Works of Douglas County, 3755 E 25th Street, Lawrence, Kansas 66046. Proposal forms will be issued up to, but not after the close of business on the day preceding the opening of bids.

102.2(a) Prequalification Requirements. - DELETE the first sentence beginning with "Before...." and ending with "....work" and ADD - Bidders shall be prequalified for the type and magnitude of work covered by this Contract with the Kansas Department of Transportation as of the date established for receiving and opening of bids and shall give signed permission, if requested by the Engineer, to Douglas County, Kansas, to obtain the bidder's qualification from the Kansas Department of Transportation. Bidders will be classified under one or more of the following classifications:

102.11 BID BONDS - DELETE item and ADD - No Proposal will be accepted unless accompanied by a certified check, cashier's check or a bid bond in the amount of five percent (5%) of the base bid and made payable to the Board of County Commissioners, Douglas County, Kansas. The full amount of the proposed guaranty shall be forfeited to the County in liquidation of damages sustained in the event the bidder (or bidders) fail to execute a satisfactory Contract and file Contract Bonds within twenty-one (21) days after the notice of the award of Contract.

The Guarantees of the two (2) lowest responsible bidders shall remain in full force until such time as the execution of a Contract has been completed by the successful bidder and satisfactory Contract Bonds have been furnished. The Guarantees will be returned after the above has been accomplished.

SPECIFICATIONS (Continued)

102.12 SUBMITTING PROPOSALS - DELETE item and ADD - Each Proposal must be submitted on forms obtainable at the Office of the Director of Public Works, 3755 E 25th Street, Lawrence, Kansas 66046, and must be submitted in sealed envelopes, addressed to the Office of the County Clerk, Courthouse, Lawrence, Kansas, upon which is clearly written or printed "Proposal for Douglas County Project No. 2013-18", and the name and address of the bidder. When a Proposal is sent by mail, the above mentioned envelope shall be enclosed in another envelope addressed to the County Clerk, Courthouse, Lawrence, Kansas. All Proposals shall be filed prior to the time and at the place specified in the Notice to Contractors. Proposals received after the stated time for filing will be returned to the bidders unopened. Faxed bids will not be accepted. Douglas County is not responsible for lost or misdirected bids, whether lost or misdirected by the postal or courier service of the bidder or the Douglas County mail room.

102.13 WITHDRAWING PROPOSALS BEFORE THE LETTING - DELETE item and ADD - A Proposal may be withdrawn after it has been delivered to the Office of the County Clerk, Courthouse, Lawrence, Kansas, by a letter or by written request of the bidder or his authorized representative in person, provided the request is in the hands of the County Clerk or Board of County Commissioners before the stipulated time for the opening of the Proposals.

102.14 REVISING PROPOSALS – DELETE item and ADD -A withdrawn Proposal may be corrected or altered in person by the bidder or his authorized representative and resubmitted before the stipulated time for opening of the Proposals.

Proposals cannot be altered or corrected by wire or letter.

Section 103

AWARD AND EXECUTION OF CONTRACT

103.3 CONTRACT BOND REQUIREMENTS - DELETE item and ADD - The successful bidder before entering into a Contract and within twenty-one (21) days after notice of the award of the Contract, shall execute a Statutory Bond and a Performance and Maintenance Bond in the form prescribed by the County and in the penal sum of the amount of the Contract, with a Surety to be approved by the County. The Statutory Bond and the Performance and Maintenance Bond shall be conditioned upon the faithful performance of the Contract and the payment of all indebtedness incurred for all labor, materials and supplies furnished therefore. The Bonds must be kept in full force for the time required by law and, if longer, during the applicable warranty periods. In the event the Surety or Bonding Company fails or becomes financially insolvent, then the Contractor shall, within five (5) business days of such failure or insolvency, file new and sufficient bonds in the amount designated by the County.

103.4 (a) EXECUTING THE CONTRACT - DELETE this section and ADD - The successful bidder shall furnish satisfactory Bonds, certificate(s) of insurance, and sign the contract within twenty-one (21) days after notice of the award of Contract.

SPECIFICATIONS (Continued)

103.5 FAILING TO EXECUTE THE CONTRACT - DELETE item and ADD - The failure of the successful bidder to execute a Contract and file Contract Bonds within twenty-one (21) days from the date of the notice of the award shall, at the option of the County, be just cause for the annulment of the award and for the forfeiture of the proposal guaranty to the County, not as a penalty but in liquidation damages sustained through delay.

In the event that the County opts to annul the award, the Contract may be reawarded to the next lowest responsible bidder, or Proposals may again be received at some later date.

Section 109

MEASUREMENT AND PAYMENT

109.2 SCOPE OF PAYMENT – ADD the following paragraph 109.2(f)RETAINAGE –: From the grand total of the work completed as estimated by the Engineer, there shall be deducted five (5) percent to be retained by the County as required by KSA 68-1120 until full and satisfactory completion of the Contract, Specifications and Contract Documents and the Engineer shall certify the balance to the Commission for payment; except that no amount less than Five Hundred (\$500.00) will be paid unless the total amount of the Contract remaining unpaid is less than Five Hundred Dollars (\$500.00).

109.5 PROGRESS PAYMENTS, DELETE the last sentence of subsection 109.5(a) “Work Accomplished” and replace with the following – “The Engineer may withhold from progress payments, liquidated damages, reimbursement for remedial work under subsection 105.5f., excess costs for breach of contract, final cleanup work expenses, five (5) percent contract retainage as required by KSA 68-1120, and other deducts the Contract Documents specify.

DOUGLAS COUNTY, KANSAS
PROJECT NO. 2013-18
BID # 16-F-0001
PROPOSAL

TO THE BOARD OF COUNTY COMMISSIONERS OF
DOUGLAS COUNTY, KANSAS
COURTHOUSE
LAWRENCE, KANSAS 66044

1. Proposal of Bryan-Ohlmeier Construction Co., Inc for the performance of "Douglas County Project No. 2013-18", in Douglas County, Kansas, by the construction of the work as described in the specifications and contract documents for the above mentioned project as set forth in the "Schedule of Prices".
2. The undersigned agrees to execute a contract for the proposed work within twenty-one (21) days after notice of the award of the Contract and to complete the work, if the proposal is accepted, as stated in Special Provision 07-DG-201A. The earliest anticipated date for the Notice to Proceed is March 7, 2016.
3. In conformity with Article 108.8 of the Specifications, the liquidated damages for this Contract shall be as stated in TABLE OF LIQUIDATED DAMAGES.
4. In submitting this bid, the undersigned declares that he is the only person interested in said bid; that is made without any connection with any person or persons making another bid for the same Contract; that is in all respects fair and without collusion, fraud or misrepresentation.
5. The undersigned further declares that he has carefully examined the specifications, form of contract, and special provisions, and that he has inspected the actual location of the work, together with the local sources of supplies, and has satisfied himself as to all quantities and conditions, and understands that in signing this proposal he waives all right to plead any misunderstanding regarding the same.
6. The undersigned acknowledges receipt of the following Addenda:

Addendum No.

Dated

Bryan-Ohlmeier Construction Co., Inc
Name of Organization

By:

Craig Ohlmeier
President

DOUGLAS COUNTY, KANSAS
PROJECT NO. 2013-18
BID # 16-F-0001

SCHEDULE OF PRICES

<u>LINE ITEM NO.</u>	<u>ROAD ITEMS</u>	<u>UNIT</u>	<u>QUANTITY</u>	<u>UNIT COST</u>	<u>AMOUNT</u>
1	REMOVAL OF EXISTING STURCTURE	L.S.	1	22,000	22,000
2	CLEARING & GRUBBING	L.S.	1	4,000	4,000
3	ROCK EXCAVATION	C.Y.	47	25	1,175
4	COMMON EXCAVATION (RURAL)	C.Y.	199	10.50	2,089.50
5	COMMON EXCAVATION (CONTRACTOR FURNISHED)	C.Y.	373	18.50	6,900.50
6	COMPACTION OF EARTHWORK (TYPE A)(MR- 5-5)	C.Y.	429	3.15	1,351.35
7	CONCRETE PAVEMENT (10 UNIF.)(AE)(BR. APP.)	S.Y.	89.2	195	17,394
8	MANHOLE (PRECAST)	EACH	1	3,675	3,675
9	ENTRANCE PIPE (24")(RCP)	L.F.	31	54.50	1,689.50
10	END SECTION (24")(RC)	EACH	1	1,130	1,130
11	GUARD FENCE, STEEL PLATE	L.F.	162.5	72	11,700
12	GUARD FENCE, END TERMINAL (SRT)	EACH	3	2,300	6,900
13	FIELD OFFICE & LAB (TYPE B)	L.S.	1	2,500	2,500
14	MOBILIZATION	L.S.	1	26,500	26,500
15	CONTRACTOR CONSTURCTION STAKING	L.S.	1	2,625	2,625
16	OBJECT MARKERS (TYPE III)	EACH	4	150	600
17	TRAFFIC CONTROL	L.S.	1	4,500	4,500
18	HMA-COMMERCIAL GRADE (CLASS A) SURFACE COURSE	TON	36	110	3,960
19	HMA-COMMERCIAL GRADE (CLASS A) BASE COURSE	TON	124	110	13,640
20	HMA-COMMERCIAL GRADE (CLASS A) PATCHING	TON	25	145	3,625
21	AGGREGATE SURFACING (AB-3)	TON	229	28	6,412
22	TEMPORARY SEEDING	L.S.	1	5,000	5,000
23	SILT FENCE	L.F.	450	5 ⁰⁰	2,250
24	BIODEGRADABLE LOG (9")	L.F.	225	6.50	1,462.50

DOUGLAS COUNTY, KANSAS
PROJECT NO. 2013-18
BID # 16-F-0001

SCHEDULE OF PRICES

<u>LINE ITEM NO.</u>	<u>ROAD ITEMS</u>	<u>UNIT</u>	<u>QUANTITY</u>	<u>UNIT COST</u>	<u>AMOUNT</u>
25	BIODEGRADABLE LOG (12")	L.F.	225	7.50	1,687.50
26	BIODEGRADABLE LOG (18"-20")	L.F.	250	10.00	2,500
27	TEMPORARY DITCH CHECK (ROCK)	C.Y.	24	65	1,560
28	MULCH TACKING SLURRY	LBS	300	5 ⁰⁰	1,500
29	MULCH (TEMPORARY)	TON	0.7	525	367.50
30	CLASS III EXCAVATION	C.Y.	116	45	5,220
31	CONCRETE GRADE 4.0 (AE)(SA)	C.Y.	135.1	625	84,437.50
32	REINFORCING STEEL (GR.60)(EPOXY)	LB	45830	1.10	50,413
33	REINFORCING STEEL (GR. 60)(REPAIR)(EPOXY)(SET)	LB	1	\$3.00	\$3.00
34	DRILLING & GROUTING	EACH	148	25	3,700
35	WELDED STUD SHEAR CONNECTORS	EACH	2760	15	41,400
36	BRIDGE PAINTING	L.S.	1	8,500	8,500

GRAND TOTAL BID 354,367.85

CONTRACTOR Bryan - Olmeier Construction Co. Inc.

NOTE: Bidder shall extend all items and total bid.

DOUGLAS COUNTY, KANSAS
PROJECT NO. 2013-18
BID # 16-F-0001

CONTRACT

THIS CONTRACT, made and entered into this _____ day of _____, 2016, by and between the BOARD OF COUNTY COMMISSIONERS OF DOUGLAS COUNTY, KANSAS, Party of the First Part, hereinafter referred to as the COUNTY, and _____, Party of the Second Part, hereinafter referred to as the CONTRACTOR.

WITNESSETH:

Article 1: It is hereby mutually agreed, that for and in consideration of the sum or sums to be paid the Contractor by the County as set forth in the General Clauses, the said Contractor shall furnish all labor, equipment, accessories and materials (except materials salvaged or otherwise furnished as specified) and shall perform all work necessary to construct and complete the improvements in a good, substantial and workmanlike manner, ready for use, and in strict accordance with the Specifications and Contract Drawings as approved and filed pursuant to law in the Office of the County Clerk of Douglas County, Kansas.

Article 2: It is hereby further agreed, that, in consideration of the faithful performance of the work by the Contractor, the County shall pay the Contractor the sum or sums due him by reason of said faithful performance of the work, at stated intervals and in amounts certified by the Engineer, in accordance with the Specifications and Contract Documents, and set forth in the Proposal as accepted by the County, subject to compliance with K.S.A 68, Article 11.

Article 3: It is hereby further agreed that Contractor will, for a period of twelve (12) months following the County's acceptance of the Contractor's work, at the request of County, correct any defects in the work due to faulty or defective materials or workmanship, without additional cost to the County; provided that neither final payment by the County nor the acceptance of the Contractor's work shall relieve Contractor, or its surety under the Performance and Maintenance Bond, from such obligation to cure any such defects.

Article 4: It is hereby further agreed that, at the completion of the work, and its acceptance by the County, all sums due the Contractor by reason of his faithful completion of the work, taking into consideration additions to or deductions from the contract price by reasons of alterations or modifications of the original contract or by reasons of "Force Account" work authorized under the Contract in accordance with the provisions of the General Clauses, will be paid the Contractor by the County within sixty (60) days after said completion and acceptance.

Article 5: It is hereby further agreed, that the "he" or "him" wherever used herein as referring to the Contractor shall be deemed to referring to the Contractor, his-her-theirs heirs, executors, administrators, successors, or assigns.

DOUGLAS COUNTY, KANSAS
PROJECT NO. 2013-18
BID # 16-F-0001

CONTRACT (continued)

Article 6: It is hereby further agreed that any reference herein to the "Contract Documents" shall include all "Contract Documents" as specifically set out in the Specifications and are hereby made a part of this Contract as fully as if set out in length herein.

IN WITNESS WHEREOF, the Party of the First Part and Party of the Second Part, respectively, have caused this agreement to be duly executed the day and year first hereinwritten, in quadruplicate, all copies of which to all intents and purposes shall be considered as the original.

ATTEST:

BOARD OF COUNTY COMMISSIONERS OF
DOUGLAS COUNTY, KANSAS

County Clerk

Chairman

Date

Commissioner

Commissioner

Approved as to Legality:

Douglas County Counselor

Name of Organization

Date

By: _____

Title of Signature

BOND NO. _____

DOUGLAS COUNTY, KANSAS
PROJECT NO. 2013-18
BID # 16-F-0001

STATUTORY (PAYMENT) BOND

KNOW ALL MEN BY THESE PRESENTS THAT:

We, _____, as Principal, and _____, a surety company duly authorized to do business in the State of Kansas, as Surety, are held and firmly bound unto the State of Kansas in the penal sum of _____ Dollars (\$_____) (the current amount of the contract price between Principal and Owner) lawful money of the United States of America, for the payment of which sum well and truly to be made, bind ourselves and our respective heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH THAT, WHEREAS, the Principal has on the _____ day of _____, 20____, entered into a written Agreement with the Board of County Commissioners of Douglas County, Kansas, hereinafter called the Owner, for furnishing labor, equipment, material, and supplies used or consumed in connection with the installation, construction of, or in making such improvements, equipment, and services described in said Agreement, all in accordance with the plans, specifications and other Contract Documents described therein and as supplemented and otherwise changed during the project (the "Undertaking"). The Agreement (including but not limited to the plans, specifications and other Contract Documents) is by reference made a part hereof, and is hereinafter called the Contract.

NOW, THEREFORE, if the Principal or any Subcontractor or Subcontractors of the Principal shall pay all indebtedness incurred for the Undertaking as required under the Contract, then this obligation shall become null and void; otherwise, it shall remain in full force and effect. If the Principal or any Subcontractor or Subcontractors of the Principal fails to duly pay all indebtedness incurred for the Undertaking as required under the Contract, then the Surety shall pay the same in any amount not exceeding the amount of this obligation, together with any interest and attorneys' fees as provided by law.

PROVIDED, FURTHER, that the Surety hereby stipulates and agrees, for value received, that no change, extension of time, modification, supplement, alteration or addition to the undertakings, covenants, terms or conditions of the Contract or the Undertaking, shall in any way affect its obligations on this bond. The Surety does hereby waive notice of any change, extension of time, modification, supplement, alteration or addition to the terms or conditions of the Contract or Undertaking. The Surety stipulates and agrees that the penal sum of this bond shall be automatically increased or decreased by any change order(s) to the Contract as approved by the Owner.

Nonpayment of the bond premium will not invalidate this bond nor shall the Owner be obligated for the payment of any bond premium.

The Surety and Principal agree that any persons interested shall have a direct right of action hereunder against the Principal and Surety.

IN WITNESS WHEREOF, the Principal and Surety have caused this bond to be duly signed this ____ day of _____, 20__.

Principal

By _____

(Official Title)

Surety Company

By: _____
(Attorney-In-Fact)

By: _____
(Kansas Agent)

(A certified copy of the Attorney-in-Fact's Power of Attorney from the Surety, to include the date and amount of the bond, must be attached to this bond).

BOND NO. _____

DOUGLAS COUNTY, KANSAS
PROJECT NO. 2013-18
BID # 16-F-0001

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS THAT:

We, _____, as Principal, and _____, a surety company duly authorized to do business in the State of Kansas, as Surety, are held and firmly bound unto the Board of County Commissioners of Douglas County, Kansas, as Obligee, in the penal sum of _____ Dollars (\$_____) (the current amount of the contract price between Principal and Obligee), lawful money of the United States of America, for the payment of which sum well and truly to be made, bind ourselves, and our respective heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH THAT, WHEREAS, the Principal has, on _____, 20____, entered into a written Agreement with the Obligee for furnishing labor, equipment, material, and supplies in connection with the installation, construction of or in making such improvements, equipment, and services described in said Agreement, all in accordance with the plans, specifications and other Contract Documents described therein and as supplemented and otherwise changed during the project. The Agreement (including but not limited to the plans, specifications and other Contract Documents) is by reference made a part hereof, and is hereinafter called the Contract.

NOW, THEREFORE, if the Principal shall and will, in all particulars, well, duly and faithfully observe, perform and abide by each and every covenant, condition, obligation and part of the Contract, according to the true intent and meaning in each case, and hold the Obligee harmless against all claims, loss or damage which it may sustain or suffer by reason of any breach of said Contract by said Principal or by reason of any injury to persons or property occasioned by the action of said Principal or its employees, and if said Principal maintains the improvement, equipment, and service as provided for in said Contract and make good all defects in materials and workmanship as required under the Contract, then this obligation shall be and become null and void; otherwise, it shall remain in full force and effect. Whenever the Principal is, and is declared by the Obligee to be, in default under the Contract, the Surety shall remedy the default at its expense by promptly (a) completing the Contract in accordance with its terms and conditions, through its agents or independent contractors; or (b) obtaining a bid or bids for completing the Contract in accordance with its terms and conditions, and, upon determination by the Obligee of the lowest and best bid, arrange for an agreement between such bidder and the Obligee, secured by payment and performance bonds, and pay to Obligee the final cost of such agreements less the balance of the Contract Price, but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof as the same may be increased by change order(s) to the Contract as approved by the Obligee; or (c) work out such other arrangements as are accepted by Obligee in writing. The term "balance of the Contract Price," as used herein, shall mean the total amount payable by the Obligee to the Principal under the Contract, and any amendments thereto, less the amount paid by the Obligee to the Principal.

PROVIDED, FURTHER, that the Surety hereby stipulates and agrees, for value received, that no change, extension of time, modification, supplement, alteration or addition to the undertakings, covenants, terms or conditions of the Contract or the Undertaking, shall in any way affect its obligations on this bond. The Surety does hereby waive notice of any change, extension of time, modification, supplement, alteration or addition to the terms or conditions of the Contract or Undertaking. The Surety stipulates and agrees that the penal sum of this bond shall be automatically increased or decreased by any change order(s) to the Contract as approved by the Obligee. Principal and Surety further stipulate and agree that acceptance, approval or certification of completion of work under the Contract and/or payment (final or otherwise) by Obligee shall not relieve the Principal or Surety from any liability for any failure to fully perform the Contract or any other obligation on this bond.

Nonpayment of the bond premium will not invalidate this bond nor shall the Obligee be obligated for the payment of any bond premium.

IN WITNESS WHEREOF, the Principal and Surety have caused this bond to be duly signed this ____ day of _____, 20____.

Principal

By _____

(Official Title)

Surety Company

By: _____
(Attorney-In-Fact)

By: _____
(Kansas Agent)

(A certified copy of the Attorney-in-Fact's Power of Attorney from the Surety, to include the date and amount of the bond, must be attached to this bond).
Sufficiency of the Bond Approved by:

Chairperson of Board of County Commissioners

Date: _____

Form and Amount of Bond Approved By:

County Counselor

Date: _____

NOTE:

1. Date of bond must not be prior to date of Agreement.
2. If Principal is a partnership, all partners should execute bond.
3. Surety companies executing bonds must appear on the U.S. Department of the Treasury's most current listing of approved sureties (Department Circular 570, as amended), and be authorized to transact business in the State of Kansas.
4. Accompany this bond with Attorney-in-Fact's authority from the Surety certified to include the date of the bond.

SPECIAL PROVISIONS
TO THE
STANDARD SPECIFICATIONS
EDITION OF 2007

NOTE: Whenever this special provision conflicts with the Plans, Supplemental Specifications or Standard Specifications, this Special Provision shall govern.

SALES TAX EXEMPTION

In accordance with the provisions of K.S.A. 79-3606 (b), this Douglas County Project qualifies for Sales Tax Exemption. A sales tax exemption certificate number will be furnished to the Contractor following award of the Contract. The Contractor shall furnish to the Engineer copies of invoices on all materials incorporated in this project.

SPECIAL PROVISIONS
TO THE
STANDARD SPECIFICATIONS
EDITION OF 2007

NOTE: Whenever this special provision conflicts with the Plans, Supplemental Specifications or Standard Specifications, this Special Provision shall govern.

DOUGLAS COUNTY
CONTRACTUAL PROVISIONS ATTACHMENT

- (a) Terms Herein Controlling Provisions: It is expressly agreed that the terms of each and every provision in this attachment shall prevail and control over the terms of any other conflicting position in any other document relating to and a part of the contract in which this attachment is incorporated. As used herein, the term "Douglas County" shall refer to Douglas County and any of its agencies, offices, and departments entering into the contract.
- (b) Agreement With Kansas Law: All contractual agreements shall be subject to, governed by, and construed according to the laws of the State of Kansas.
- (c) Termination Due to Lack of Funding Appropriation: If, in the judgment of the County Administrator, sufficient funds are not appropriated to continue the function performed in this agreement and for the payment of the charges hereunder, Douglas County may terminate this agreement at the end of its current fiscal year. Douglas County agrees to give written notice of termination to vendor/contractor at least 30 days prior to the end of its current fiscal year, and shall give such notice for a greater period prior to the end of such fiscal year as may be provided in the contract, except that such notice shall not be required prior to 90 days before the end of such fiscal year. Vendor/contractor shall have the right, at the end of such fiscal year, to take possession of any unpaid equipment provided Douglas County under the contract. Douglas County will pay to the vendor/contractor all regular contractual payments incurred through the end of such fiscal year, plus contractual charges incidental to the return of any such equipment. Upon termination, of the agreement by Douglas County, title to any such unpaid equipment shall revert to vendor/contractor at the end of Douglas County's current fiscal year. The termination of the contract pursuant to this paragraph shall not cause any penalty to be charged to Douglas County or the vendor/contractor.
- (d) Disclaimer of Liability: Douglas County shall not hold harmless or indemnify any vendor/contractor beyond that liability under the Kansas Tort Claims Act (K.S.A 75-6101 et seq.).
- (e.) Arbitration, Payment Due, Interest, Warranties: Notwithstanding any language to the contrary, no interpretation shall be allowed to find Douglas County has agreed to binding arbitration, or the payment of damages or penalties upon the occurrence of a contingency.

Payment from Douglas County to vendor/contractor shall not be due sooner than 30 days after the delivery of an invoice from vendor/contractor to Douglas County. Further, Douglas County does not agree to pay attorney fees or late payment charges beyond those available under K.S.A. 16-201, and no provision will be given effect which attempts to exclude, modify, disclaim or otherwise attempt to limit implied warranties of merchantability and fitness for a particular purpose.

- (f) Representative's Authority To Contract: By signing this contract, the representative of the vendor/contractor hereby represents that such person is duly authorized by the vendor/contractor to execute this contract on behalf of the vendor/contractor and that the vendor/contractor agrees to be bound by the provisions thereof.
- (g) Responsibility For Taxes: Douglas County shall not be responsible for, nor indemnify vendor/contractor for, any federal, state, or local taxes which may be imposed or levied upon the subject matter of this contract.
- (h) Anti-Discrimination Clause: The vendor/contractor agrees: (a) to comply with the Kansas Act Against Discrimination (K.S.A. 44-1001 et seq.) and the Kansas Age Discrimination in Employment Act (K.S.A. 44-1111 et seq.) and the applicable provisions of the Americans with Disabilities Act (42 U.S.C. 12101 et seq.) (ADA) and to not discriminate against any person because of race, religion, color sex, disability, national origin or ancestry, or age in the admission or access to, or treatment or employment in, its programs or activities; (b) to include in all solicitations or advertisements for employees, the phrase "equal opportunity employer"; (c) to comply with the reporting requirements set out at K.S.A. 44-1031 and K.S.A. 44-1116; (d) to include those provisions in every subcontract or purchase order so that they are binding upon such subcontractor or vendor; (e) that a failure to comply with the reporting requirements of (c) above or if the vendor/contractor is found guilty of any violation of such acts by the Kansas Human Rights Commission, such violation shall constitute a breach of contract and the contract may be cancelled, terminated or suspended, in whole or in part, by Douglas County; (f) if it is determined that the vendor/contractor has violated applicable provisions of ADA, such violation shall constitute a breach of contract and the contract may be cancelled, terminated or suspended, in whole or in part by Douglas County.

Parties to this contract understand that the provisions of this paragraph (h) (with the exception of those provisions relating to the ADA) are not applicable to a vendor/contractor who employs fewer than four employees during the term of such contract or whose contracts with Douglas County cumulatively total \$5,000 or less during the fiscal year of Douglas County.

SPECIAL PROVISIONS
TO THE
STANDARD SPECIFICATIONS
EDITION OF 2007

NOTE: Whenever this special provision conflicts with the Plans, Supplemental Specifications or Standard Specifications, this Special Provision shall govern.

GENERAL DESCRIPTION:

Douglas County Project 2013-18 consists of the bridge deck removal and replacement, removal and replacement of structural steel, concrete approach slabs, grading, bituminous patching, base, and surfacing, seeding, guardrail installation and traffic control.

This bridge is located over the Washington Creek in Lone Star, KS on Douglas County Route 1039.

SPECIAL PROVISIONS
TO THE
STANDARD SPECIFICATIONS
EDITION OF 2007

NOTE: Whenever this special provision conflicts with the Plans, Supplemental Specifications or Standard Specifications, this Special Provision shall govern.

PLANS: The following plans accompany and supplement the Specifications:

<u>Sheet No.</u>	<u>Sheet Title</u>
1	Cover Sheet
2	Typical Grading Section
3	Plan and Profile
4	Paving and Guardrail Layout
5-6	Concrete Bridge Approach
7-13	Guardrail
14-14.001	Precast Manholes
15	Concrete Pipe End Sections
16	General Notes and Quantities
17-32	Bridge Detail Sheets
33	Summary of Quantities
34-40	Temporary Erosion and Pollution Control
41	Summary of Quantities (Surfacing)
42-47	Traffic Control Details
48-53	Cross Sections

SPECIAL PROVISIONS
TO THE
STANDARD SPECIFICATIONS
EDITION OF 2007

NOTE: Whenever this special provision conflicts with the Plans, Supplemental Specifications or Standard Specifications, this Special Provision shall govern.

ENGINEER: For the performance of work under this Contract, Douglas County, Kansas will perform the duties of the Engineer, as defined in the Specifications and hereinafter is referred to as the Engineer.

SPECIAL PROVISIONS
TO THE
STANDARD SPECIFICATIONS
EDITION OF 2007

NOTE: Whenever this special provision conflicts with the Plans, Supplemental Specifications or Standard Specifications, this Special Provision shall govern.

OPERATIONS OF OTHERS: The right is reserved by the County to have other work performed by other Contractors and to permit public utility companies and others to do work during the construction of and within the limits of or adjacent to the Project. The Contractor shall conduct his operations and cooperate with such other parties so that interference with such other work will be reduced to a minimum. The Contractor shall agree, and hereby does agree, to make no claims against the County for additional compensation due to delays or other conditions created by the operations of other such parties. Should a difference of opinion arise as to the rights of the Contractor and others working within the limits of or adjacent to the Project, the Engineer will decide as to the respective rights of the various parties involved in order to assure the completion of the work in general harmony and in a satisfactory manner and his decision shall be final and binding upon the Contractor.

To expedite the completion of the over-all Project, it will be necessary for the work under this Contract to be coordinated with the construction under other contracts and by others. As far as possible, each Contractor shall so plan and conduct his operations and dispose of his materials as not to interfere with the operations of or damage the work of others engaged upon the construction of the overall Project. The Contractor shall perform his work in proper sequence with relation to that of the other Contractors and as the Engineer may direct. Each Contractor starting work while construction under other Contracts is in progress within the limits of the Project shall begin his work at certain locations which the Engineer may designate or approve and thereafter shall prosecute the work at such locations and in such order as the Engineer may from time to time prescribe or approve.

SPECIAL PROVISIONS
TO THE
STANDARD SPECIFICATIONS
EDITION OF 2007

NOTE: Whenever this special provision conflicts with the Plans, Supplemental Specifications or Standard Specifications, this Special Provision shall govern.

INSPECTION: The Contractor shall furnish access to all parts of the Project for inspection by the Engineer or authorized representative of the Engineer. The Contractor shall notify the Engineer twenty-four (24) hours in advance of beginning work which requires inspection.

SPECIAL PROVISIONS
TO THE
STANDARD SPECIFICATIONS
EDITION OF 2007

NOTE: Whenever this special provision conflicts with the Plans, Supplemental Specifications or Standard Specifications, this Special Provision shall govern.

RIGHT-OF-WAY: The right-of-way will be available for use by the Contractor for access roads and storage space; provided that such use does not interfere with the permanent construction of the overall Project under this or any other contract and shall be subject to similar use by other Contractors working on various parts of the Project. Such use shall not impair the safety of the traveling public. Right-of-way shall be restored by the Contractor to its original condition before final payment will be made.

SPECIAL PROVISIONS
TO THE
STANDARD SPECIFICATIONS
EDITION OF 2007

NOTE: Whenever this special provision conflicts with the Plans, Supplemental Specifications or Standard Specifications, this Special Provision shall govern.

SPECIFICATIONS: The bidder and/or Contractor are required to furnish his own copies of the Standard Specifications for State Road and Bridge Construction of the Kansas Department of Transportation, Edition of 2007.

<http://www.ksdot.org/burConsMain/specprov/2007SSDefault.asp>

SPECIAL PROVISIONS
TO THE
STANDARD SPECIFICATIONS
EDITION OF 2007

NOTE: Whenever this special provision conflicts with the Plans, Supplemental Specifications or Standard Specifications, this Special Provision shall govern.

INDEMNITY PROVISION: The Contractor hereby agrees to indemnify and hold harmless the County for any liability resulting from the injury or death of any person, including Contractor's employees, arising from unsafe conditions at the work site. "Unsafe" shall mean a failure by the Contractor to adhere to any applicable federal, state or local government standards established to protect the health, safety and welfare of the Contractor's employee, other persons at the work site, and the public in general.

SPECIAL PROVISIONS
TO THE
STANDARD SPECIFICATIONS
EDITION OF 2007

NOTE: Whenever this Special Provision conflicts with the Plans, Supplemental Specifications or Standard Specifications, this Special Provision shall govern.

SECTION 804

MAINTENANCE AND RESTORATION

OF HAUL ROADS

SUBSECTION 804.1, DESCRIPTION, Page 800-10, Delete the second paragraph and replace with the following:

For the purpose of this specification, a haul road is any public road in Kansas, excluding State highways, over which 3,000 tons or more material is hauled for the construction of the project. Such material includes both commercial delivery and Contractor production.

(Note: The following sentence has been deleted from Subsection 804.1: "Roads normally used for hauling commercial material into or from established plant sites and quarries are not designated as part of the haul road.")

SUBSECTION 804.4, MEASUREMENT AND PAYMENT, Page 800-10, Delete the first paragraph and replace with the following:

If the Contractor is obligated to perform maintenance and restoration as stated within Section 804, with exception of dust control, the Engineer will Measure and Pay "Maintenance and Restoration of Haul Roads (Set)" as a lump sum.

Labor, Equipment, Materials and incidentals necessary to reduce dust on active haul roads including return routes, in pits and staging areas, and on the project will not be measured directly but shall be considered subsidiary to other items in the contract.

SPECIAL PROVISION
TO THE
STANDARD SPECIFICATIONS
EDITION OF 2007

NOTE: Whenever this special provision conflicts with the Plans, Supplemental Specifications of Standard Specifications, this Special Provision shall govern.

SECTION 611

HOT MIX ASPHALT (HMA) – COMMERCIAL GRADE

SECTION 611.1 DESCRIPTION, Add the following Bid Items:

<u>BID ITEMS</u>	<u>UNITS</u>
HMA – COMMERCIAL GRADE (CLASS A) (SURFACE)	TON
HMA – COMMERCIAL GRADE (CLASS A) (BASE)	TON
HMA – COMMERCIAL GRADE (CLASS A) (PATCHING)	TON

SECTION 611.2 MATERIALS, TABLE 611-1,

Change the "Reclaimed Asphalt Pavement (RAP) (max. %)" from 25% to 10% for mixes designated for surface construction and 30% for mixes designated for asphalt base and patching.

Change the Binder requirement to PG64-22.

Delete note (1) shown below table 611-1.

SPECIAL PROVISIONS
TO THE
STANDARD SPECIFICATIONS
EDITION OF 2007

NOTE: Whenever this special provision conflicts with the Plans, Supplemental Specifications or Standard Specifications, this Special Provision shall govern.

PRICE ADJUSTMENT FOR ASPHALT MATERIALS

Prices quoted for asphalt material (HMA – Commercial Grade (Class A)) will be based on the Computed Monthly Asphalt Material Index in effect for January, 2016 as listed @ <http://www.ksdot.org/burconsmain/ppreq/AsphaltPriceIndex.asp>. Hot mix asphalt provided/placed will be adjusted in subsequent months \$0.50/ton for each \$10.00 increase/decrease in the Computed Monthly Asphalt Material Index, based on the initial price index shown for January, 2016.

The adjusted unit cost will apply until all work is complete. If contract time expires, no additional increases will be allowed, but if the asphalt price decreases during this time the revised unit costs will reflect this change.

Example:

Change in Price of Asphalt Oil/Ton	Adjustment in the Bid Price of Asphalt Mat'l
\$0.00 - \$9.99	\$0.00
\$10.00 - \$19.99	\$0.50
\$20.00 - \$29.99	\$1.00
\$30.00 - \$39.99	\$1.50

SPECIAL PROVISIONS
TO THE
STANDARD SPECIFICATIONS
EDITION OF 2007

NOTE: Whenever this special provision conflicts with the Plans, Supplemental Specifications of Standard Specifications, this Special Provision shall govern.

Project Scheduling, Specified Calendar Completion Date, and Liquidated Damages:

1. The "Notice to Proceed" will be issued on **March 7, 2016**. A minimum of ten (10) Calendar Day notice is required before closing any roadway. Temporary Barricades and signs shall be erected 7 days prior to the closure per plan sheet 47.
2. This project shall be completed and opened to "unrestricted traffic" as defined in section 108.4 of the Specifications on or before **June 3, 2016**.
3. Cleanup Time: The Contractor will be allowed 5 clean-up calendar days as per Section 108.6.
4. Liquidated damages shall be as shown in Section 108.8, Table 108-1 of the Standard Specifications.

KANSAS DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION TO THE
STANDARD SPECIFICATIONS, EDITION 2007

Delete SECTION 401 and replace with the following:

SECTION 401

CONCRETE

401.1 DESCRIPTION

Provide the grades of concrete specified in the Contract Documents.

401.2 MATERIALS

Provide materials that comply with the applicable requirements.

Coarse, Fine and Mixed Aggregate	DIVISION 1100
Admixtures, Plasticizers, and Silica Fume	DIVISION 1400
Cement, Fly Ash, and Ground Granulated Furnace Slag.....	DIVISION 2000
Water	DIVISION 2400

ADD THE FOLLOWING -

401.25 CONCRETE USED ON DOUGLAS COUNTY PROJECTS

a. ALL CONCRETE USED ON DOUGLAS COUNTY PROJECTS MUST BE PREVIOUSLY APPROVED BY KDOT (SECTION 401 – LATEST EDITION) FOR A SIMILAR PROJECT OR USE, AND HAVE AN ASSIGNED KDOT MIX DESIGN NUMBER.

b. ALL MIX DESIGN SUBMITTALS SHALL BE FILLED OUT ON KDOT FORM 694 WITH DOUGLAS COUNTY PROJECT(S) AND BID NUMBERS ALONG WITH THE KDOT MIX DESIGN NUMBER.

401.3 CONCRETE MIX DESIGN

a. General. Design the concrete mixes specified in the Contract Documents.

Provide aggregate gradations that comply with **SECTION 1102** and Contract Documents.

If desired, contact the DME for available information to help determine approximate proportions to produce concrete having the required characteristics on the project.

Take full responsibility for the actual proportions of the concrete mix, even if the Engineer assists in the design of the concrete mix.

Submit all concrete mix designs to the Engineer for review and approval. Submit completed volumetric mix designs on KDOT Form No. 694 (or other forms approved by the DME).

Do not place any concrete on the project until the Engineer approves the concrete mix designs. Once the Engineer approves the concrete mix design, do not make changes without the Engineer's approval.

Submit test data from KT-73, KT-79 or AASHTO T-277 for all bridge overlays and any project with over 250 cubic yards of concrete (this includes concrete for structures, pavement, etc). Provide the test data for each mix, tested at the highest water-cement ratio. The mix design and test data must be submitted to KDOT at least 60 days prior to placement of concrete on the project. Two options are available for mix design procedures. Use the procedures outlined in **subsection 401.3b.** or Appendix A to design concrete mixes.

b. Concrete Mix Design Based On Previous Data. Provide concrete mix designs based on previous 28-day compressive strength test data from similar concrete mixtures. Similar mixtures are within 1000 psi of the specified 28-day compressive strength, and are produced with the same type and sources of cementitious materials, admixtures and aggregates. Consider sand sources the same, provided they are not more than 25 miles apart on the same river and no tributaries enter the river between the 2 points. Consider crushed locations similar if they are mined in one continuous operation, and there is no significant change in geology. Mixes that have changes of more than 10% in proportions of cementitious materials, aggregates or water content are not considered similar. Air entrained mixes are not considered similar to non-air entrained mixes. Test data should represent at least 30 separate batches of the mix. One set of data is the average of at least 2 cylinders from the batch. The data shall represent a minimum of 45 days of production within the past 12 months. Do not include data over 1 year old. When fewer than 30 data sets are available, the standard deviation of the data must be corrected to compensate for the fewer data points.

Provide a concrete mix design that will permit no more than 5% of the 28-day compressive strength tests to fall below the specified 28-day compressive strength (f'_c) based on equation A, and no more than 1% of the 28-day compressive strength tests to fall below the specified 28-day compressive strength (f'_c) by more than 500 psi based on equation B.

Equation A: $f'_{cr} = f'_c + 1.62 \cdot k \cdot s$

Equation B: $f'_{cr} = (f'_c - 500) + 2.24 \cdot k \cdot s$

Where: f'_{cr} = average 28-day compressive strength required to meet the above criteria.

f'_c = specified 28-day compressive strength

s = standard deviation of test data

k = constant based on number of data points

n = number of data points

$k = 1.3 - n / 100$, where $15 < n < 30$

$k = 1$, where $n > 30$

Provide a concrete mix design that has an average compressive strength that is equal to the larger of Equation A or Equation B. Submit all supporting test data with the mix design.

All other concrete mix designs.

For concrete mixes that have fewer than 15 data points, or if no statistical data is available, use Equations A and B to calculate f'_{cr} using the following values.

$s = 20\%$ of the specified 28-day compressive strength (f'_c)

$k = 1$

Provide 28-day compressive strength test data at 3 different water-cementitious ratios showing compliance with required f'_{cr} . Each set of test data shall be the average of a minimum of 3 cylinders. These mixes shall utilize materials that will be used on the project.

c. Air-Entrained Concrete for Pavement. Design air-entrained concrete for pavement according to TABLE 401-1.

TABLE 401-1: AIR-ENTRAINED CONCRETE FOR PAVEMENT

Type of Agg (SEC 1100)	Lb. of Cementitious per yd ³ of Concrete, minimum ¹	Lb. of Water per lb. of Cementitious, maximum ²	Percent of Air by Volume ³	28-Day Compressive Strength psi minimum	Volume of Permeable Voids ^{4,5} , maximum	Surface Resistivity ^{4,5} , minimum	Rapid Chloride Permeability ^{4,5} , maximum
Coarse and Fine	564	0.47	See subsection 401.3h	4000	12.00%	9.0 kΩ-cm	3000 Coulombs
MA-2							
MA-3	517						
MA-4							

¹The amount of cementitious listed is the designated minimum for concrete pavement. It may be necessary to add additional cementitious or otherwise adjust the mix proportions as permitted by the specifications to provide a mix design that complies with the compressive strength requirement.

²Maximum limit of lb. of water per lb. of cementitious includes free water in aggregates, but excludes water of absorption of the aggregates.

³The maximum air content is 10%. Take immediate steps to reduce the air content whenever the air content exceeds 8%.

⁴Provide concrete for pavement with either a maximum 28-day Volume of Permeable Voids of 12.0% as per KT-73, a minimum 28-day Surface Resistivity of 9.0 kΩ-cm as per KT-79, or a maximum 56-day Rapid Chloride Permeability of 3000 Coulombs as per AASHTO T-277 when required. Submit accelerated cure procedures for the Engineer's approval.

⁵Exclude these requirements for concrete patching material used in SECTION 833 when the existing pavement to be patched is more than 10 years old.

Improvements in concrete strength, workability and durability are possible if the combined aggregate grading is optimized. Procedures found in ACI 302.1 or other mix design techniques are acceptable in optimizing the mix design.

Use either Air-Entrained Concrete for Pavement or Optimized, Air-Entrained Concrete for Pavement. Provide the Engineer written notification of the selection prior to the pre-construction conference.

Submit the concrete mix design, and supply the Engineer with the necessary materials to enable the Engineer to test the mix properties at least 60 days before the anticipated date of using the design on the project and include the following information:

(1) A single point grading for the combined aggregates along with a plus/minus tolerance for each sieve to the Engineer. Use plus/minus tolerances to perform quality control checks and by the Engineer to perform aggregate grading verification testing. The tests may be performed on the combined materials or on individual aggregates, and then theoretically combined to determine compliance.

(2) Laboratory 28-day compressive strength test results on a minimum of 1 set of 3 cylinders produced from the proposed mix design, utilizing the actual materials proposed for use on the project. Design compressive strength should be a minimum of 2 of the Contractor's normal standard deviations for this type of mix above 4000 psi (cylinders) or meet the requirements of **subsection 401.3b**.

(3) Use historical mix production data for the plant used on the project to substantiate the standard deviation selected. If such historical data is not available or is unacceptable to the Engineer, use 5300 psi for design strength.

The Engineer will provide an initial review of the design within 5 business days following submittal. After initial review, the Engineer will perform any testing necessary to verify the design.

To verify the mix design in the field, perform compressive strength tests on cylinders made from samples taken from concrete produced at the project site before or during the first day that concrete pavement is placed on the project. If the compressive strength tests indicate noncompliance with minimum design values, add additional cement to the mix or make other appropriate mix design changes at no additional cost to KDOT.

d. Air-Entrained Concrete for Shoulders. Design air-entrained concrete for shoulders according to **TABLE 401-2**.

TABLE 401-2: AIR-ENTRAINED CONCRETE FOR SHOULDERS						
Type of Aggreg- ate (SECTI- ON 1100)	Lb. of Cementiti- ous per yd ³ of Concrete, minimum	Lb. of Water per lb. of Cementiti- ous, maximum 1	Percent of Air by Volume 2	Volume of Permea- ble Voids ^{3,4} , maximu- m	Surface Resistivit- y ^{3,4} , minimum	Rapid Chloride Permeabilit- y ^{3,4} , maximum
Coarse and Fine	520	0.49	See subsec- tion 401.3h.	12.00%	9.0.kΩ-cm	3000 Coulombs
MA-2						
MA-3	480					
MA-4						

¹Maximum limit of lb. of water per lb. of cementitious includes free water in aggregates, but excludes water of absorption of the aggregates.

²The maximum air content is 10%. Take immediate steps to reduce the air content whenever the air content exceeds 8%.

³Concrete for shoulders using the same aggregates and gradations as the mainline pavement concrete on the same project will be approved without testing for Volume of Permeable Voids, Surface Resistivity, or Rapid Chloride Permeability.

⁴Exclude these requirements for concrete patching material used in SECTION 833 when the existing pavement to be patched is more than 10 years old.

e. Concrete for Structures. Design concrete for structures as outlined in **subsection 401.3b**, with a maximum water to cementitious ratio of 0.50 and a minimum cementitious content of 480 lbs per cubic yard according **TABLE 401-3a** and **401-3b**.

TABLE 401-3a: CONCRETE		
Specified 28 Day Compressive Strengths, minimum, psi <i>f'</i>c		
Grade of Concrete:	Non Air Entrained Concrete	Air Entrained Concrete
Grade 6.0	6,000	6,000
Grade 5.0	5,000	5,000
Grade 4.5	4,500	4,500
Grade 4.0	4,000	4,000
Grade 3.5	3,500	3,500
Grade 3.0	3,000	3,000
Grade 2.5	2,500	2,500

(1) Provide air entrained concrete for structures with a target air content of 6.5 ± 1.5 percent.

(2) Maximum air content is 10%. Take immediate steps to reduce the air content whenever the air content exceeds 8%.

(3) Determine air content by KT-19 (Rollometer). A regularly calibrated air meter may be used for production with random verification by the rollometer. See KT-19 for special requirements when using the rollometer with high cementitious concretes or mixtures with midrange water reducers or plasticizers.

TABLE 401-3b: PERMEABILITY REQUIREMENTS FOR CONCRETE FOR STRUCTURES				
	Volume of Permeable Voids ¹ , maximum	Surface Resistivity ¹ , minimum	Rapid Chloride Permeability ¹ , maximum	ASTM C-1567 ² Accelerated Mortar Bar Expansion
Use Low Permeability Concrete (LPC) for Bridge Overlays	9.5%	27.0 kΩ-cm	1000 Coulombs	0.10% @ 16 days
Use Moderate Permeability Concrete (MPC) for specified Full Depth Bridge Decks	11.0%	13.0 kΩ-cm	2000 Coulombs	0.10% @ 16 days
Use Standard Permeability Concrete (SPC) for all other structure concrete not specified as Low Permeability or Moderate Permeability	12.0%	9.0 kΩ-cm	3000 Coulombs	0.10% @ 16 days

¹ Perform 28-day Volume of Permeable Voids as per KT-73, 28-day Surface Resistivity as per KT-79, or 56-day Rapid Chloride Permeability as per AASHTO T-277 when required. Submit accelerated cure procedures for the Engineer's approval.

² ASTM C-1567 only required if supplementary cementitious materials (SCMs) are utilized in the concrete.

(4) Use Quality Requirements for Structural Aggregates as listed in Special Provision to the Standard Specification 07-11009 (latest revision) Aggregates For Concrete Not Placed on Grade.

(5) Use gradation requirements for aggregates as listed in Special Provision to the Standard Specification 07-11009 Aggregates For Concrete Not Place on Grade.

(6) Use MA-6 optimized gradation for Low Permeability Concrete for Bridge Overlays.

(7) Improvements in concrete strength, workability, durability and permeability are possible if the combined aggregate grading is optimized. Procedures found in ACI 302.1 or other mix design techniques are acceptable in optimizing the mix design. See Appendix B for suggested guidelines for meeting permeability requirements.

(8) A water-reducing admixture for improving workability may be required. Adjust the designated slump accordingly.

(9) Adjust the yield cement factor (ycf) for higher air within specification limits, as allowed in the Contract Documents.

(10) When opted for, use Silica Fume for Bridge Overlays either singly or in combination with SCM's as allowed in **TABLE 401-5** and **TABLE 401-8**.

(11) When used, add silica fume with other cementitious materials during batching procedures. If the silica fume cannot be added to the cementitious materials it must be added loose to the bottom of the drum previous to the dry materials. The drum shall be wet with no standing water and not turning. The Engineer may approve shreddable bags on a performance basis, only when a central batch mixing process is used. If so, then add the bags to half of the mixing water and mix before adding cementitious materials, aggregate and remainder of water.

(12) When used, mix silica fume modified concrete for a minimum of 100 mixing revolutions.

(13) Delay the commencement of tests from 4 to 4½ minutes after the sample has been taken from a continuous mixer. If a batch type mixer is used, take the tests at the point of placement and begin testing immediately.

f. **Portland Cement and Blended Hydraulic Cement.** Unless specified otherwise in the Contract Documents, select the type of portland cement or blended hydraulic cement according to **TABLE 401-5**.

TABLE 401-5: PORTLAND CEMENT & BLENDED HYDRAULIC CEMENT	
Concrete for:	Type of Cement Allowed
Bridge Overlays and Concrete Pavement	Type IP(x) Portland-Pozzolan Cement Type IS(x) Portland-Blast Furnace Slag Cement Type IT(Ax)(By) Ternary Blended Cement Type II Portland Cement
All Structures other than Bridge Overlays and Concrete Pavement	Type I Portland Cement Type IP(x) Portland-Pozzolan Cement Type IS(x) Portland-Blast Furnace Slag Cement Type IT(Ax)(By) Ternary Blended Cement Type II Portland Cement
High Early Strength Concrete	Type III Portland Cement Type I, IP(x), IS(x), IT(Ax)(By), or II Cement may be used if strength and time requirements are met.

g. **Design Air Content.** With the exception of concrete for PCCP, use the middle of the specified air content range for the design of air-entrained concrete.

For PCCP concrete, provide a minimum air content that complies with these 2 criteria:

- a minimum by volume of 5.0% behind the paver, and
- a maximum air void spacing factor of 0.01 inch behind the paver¹.

For a typical PCCP, design the mix at the target air content plus 0.5% air content. The target air content is the air content that meets both criteria above.

If the air void spacing factor exceeds 0.01 inch, use the following formula as a guide to determine the target air content¹:

$$\text{Target \% air content at 0.01 inch} = \% \text{ air measured} + (\text{measured spacing factor} - 0.01)/0.001$$

Mixes with Laboratory or Field Prequalification spacing factors greater than 0.01 inch will not be approved.

Take immediate steps to reduce the spacing factor whenever the spacing factor exceeds 0.01 inch. Suspend paving operations when the spacing factor exceeds 0.015 inches and remove and replace the represented concrete¹.

Take immediate steps to increase the air content whenever the air content behind the paver falls below 5.0%. Suspend paving operations when 2 consecutive air contents behind the paver fall below 4.0% and remove and replace the represented concrete.

¹Does not apply to concrete used in **SECTION 833** when existing pavement to be patched is more than 10 years old.

h. Admixtures for Acceleration, Air-Entraining, Plasticizing, Set Retardation and Water Reduction. Verify that the admixtures used are compatible and will work as intended without detrimental effects. Use the dosages recommended by the admixture manufacturers. Incorporate and mix the admixtures into the concrete mixtures according to the manufacturer's recommendations. Determine the quantity of each admixture for the concrete mix design.

Redosing is permitted to accomplish slump control or air content in the field, when approved by the Engineer, time and temperature limits are not exceeded, and at least 30 mixing revolutions remain before redosing. Redose with up to 50% of the original dose.

If another admixture is added to an air-entrained concrete mixture, determine if it is necessary to adjust the air-entraining admixture dosage to maintain the specified air content.

(1) Accelerating Admixture. When specified in the Contract Documents, or in situations that involve contact with reinforcing steel and require early strength development to expedite opening to traffic, a non-chloride accelerator may be approved. The Engineer may approve the use of a Type C or E accelerating admixture. A Grade 2 calcium chloride accelerator may be used when patching an existing pavement more than 10 years old.

Add the calcium chloride by solution (the solution is considered part of the mixing water).

- For a minimum cure of 4 hours at 60°F or above, use 2% (by dry weight of cement) calcium chloride.
- For a minimum cure of 6 hours at 60°F or above, use 1% (by dry weight of cement) calcium chloride.

(2) Air-Entraining Admixture. When specified, use an air-entrainer in the concrete mixture.

(3) Water-Reducers and Set-Retarders. If unfavorable weather or other conditions adversely affect the placing and finishing properties of the concrete mix, the Engineer may allow the use of water-reducers and set-retarders. If the Engineer approves the use of water-reducers and set-retarders, their continued use depends on their performance. Verify that the admixtures will work as intended without detrimental effects. If at any point, a water-reducer is used to produce a slump equal to or greater than 7 ½ inches, comply with **subsection 401.3i.(4)**.

(4) Plasticizer Admixture. A plasticizer is defined as an admixture that produces flowing concrete, without further addition of water, and/or retards the setting of concrete. Flowing concrete is defined as having a slump equal to or greater than 7 ½ inches.

Include a batching sequence in the concrete mix design. Consider the location of the concrete plant in relation to the job site, and identify when and at what location the plasticizer is added to the concrete mixture. Do not add water after the plasticizer is added to the concrete mixture.

Manufacturers of plasticizers may recommend mixing revolutions beyond the limits specified in **subsection 401.8**. If necessary, address the additional mixing revolutions in the concrete mix design. The Engineer may allow up to 60 additional revolutions when plasticizers are designated in the mix design.

Before the concrete mixture with a slump equal to or greater than 7 ½ inches is used on the project, conduct tests on at least 1 full trial batch of the concrete mix design to determine the adequacy of the dosage and the batching sequence of the plasticizer to obtain the desired properties. Determine the air content of the trial batch both before and after the addition of the plasticizer. Monitor the slump, air content, temperature and workability at regular intervals of the time period from when the plasticizer is added until the estimated time of completed placement. At the discretion of the Engineer, if all the properties of the trial batch remain within the specified limits, the trial batch may be used in the project.

The Engineer will allow minor adjustments to the dose rate to compensate for environmental changes during placement without a new concrete mix design or trial batch.

i. Slump. Designate a slump for each concrete mix design that is within the limits in **TABLE 401-6**.

TABLE 401-6: ALLOWABLE CONCRETE SLUMP	
Concrete Use	Maximum Allowable Slump (inches)
Concrete Pavement	2 ½ ⁽¹⁾⁽²⁾
Concrete for Structures & Air-Entrained Concrete for Structures	That required for satisfactory placement of the respective parts of the structure. ⁽²⁾
Bridge Subdecks or Decks without Plasticizing Admixtures	3 ⁽²⁾
Concrete with Plasticizing Admixture for Structures, Bridge Subdecks or Decks, Air-Entrained Concrete with Plasticizing Admixture for Structures, & Concrete with Plasticizing Admixture for Prestressed Beams	7 ⁽³⁾
Concrete with Plasticizers for Drilled Shafts	(4)

⁽¹⁾If the Engineer approves, slumps in excess of 2 ½ inches are allowed for areas that are hand finished.

⁽²⁾If the designated slump is 3 inches or less, the tolerance is ±¾ inch, or limited by the maximum allowable slump for the individual type of construction. If the designated slump is greater than 3 inches (without plasticizing admixture), the tolerance is ±25% of the designated slump.

⁽³⁾If the Engineer approves the use of plasticizing admixture in the concrete, the tolerance from the designated slump is ±25% or ¾ inch, whichever is larger, limited by the maximum allowable slump for the individual type of construction. Maintain the required geometry.

⁽⁴⁾The target slump just prior to being pumped into the drilled shaft is 9 inches. If the slump is less than 8 inches, then redose the concrete as permitted in subsection 401.3i.

j. Field Blended Cement Concrete. When approved by the Engineer, the concrete mix design may include supplementary cementitious materials (SCM) such as fly ash or ground granulated blast furnace slag (GGBFS) from an approved source as a partial replacement for portland cement or blended hydraulic cement. Obtain the Engineer's approval before substituting SCMs for Type III cement. The approved source of SCM may not be changed during the project.

Supplementary materials may be inter-ground, plant blended or field blended. Supplementary materials can be combined with cement to create binary or ternary concrete mixes. Do not exceed allowable substitution rates noted in **TABLE 401-8**. Substitute 1 pound of SCM for 1 pound of cement.

TABLE 401-8: ALLOWABLE SUBSTITUTION RATE FOR SUPPLEMENTARY CEMENTITIOUS MATERIAL.	
Material	Substitution Rate*
Slag Modified	40% Maximum
C Fly Ash Modified	25% Maximum
F Ash Modified	25% Maximum
Silica Fume Modified	5% Max
Total Combined	50%

* Total Substitution Rate includes material in pre-blended cements.

Design field blended cement concrete meeting the applicable requirements for Volume of Permeable Voids, Surface Resistivity, or Rapid Chloride Permeability using the parameters described in **subsection 401.3b**.

Submit complete mix design data including proportions and sources of all mix ingredients, and the results of strength tests representing the mixes proposed for use. The strength data may come from previous KDOT project records or from a laboratory regularly inspected by Cement and Concrete Reference Laboratory (CCRL), and shall equal or exceed the strength requirements for the Grade specified in the Contract Documents. Perform compressive strength tests according to AASHTO T-22.

Provide the results of mortar expansion tests of ASTM C 1567 using the project's mix design concrete materials at their designated percentages. Provide a mix with a maximum expansion of 0.10 % at 16 days after casting.

Waive ASTM C 1567 testing when Silica Fume is used singly.

Provide the results to the Engineer at least 60 days before placement of concrete on the project.

k. High Early Strength Concrete. Design the high early strength concrete mix to comply with strength and time requirements specified in the Contract Documents. Unless otherwise specified, design high early strength concrete for pavement at a minimum of 1 of the Contractor's standard deviations above 2400 psi (cylinders) at 24 hours.

Submit complete mix design data including proportions and sources of all mix ingredients, and the results of time and strength tests representing the mixes proposed for use. The strength and time data may come from previous KDOT project records or from an independent laboratory, and shall equal or exceed the strength and time requirements listed in the Contract Documents.

401.4 MORTAR AND GROUT

a. General. Follow the proportioning requirements in **subsection 401.4b.** and **c.** for mortar and grout unless otherwise specified in the Contract Documents, including altering the proportions when a minimum strength is specified.

b. Mortar. Mortar is defined as a mixture of cementitious materials, fine aggregate and water, which may contain admixtures, and is typically used to minimize erosion between large stones or to bond masonry units.

Proportion mortar for laying stone for stone rip-rap, slope protection, stone ditch lining or pavement patching at 1 part of portland cement and 3 parts of fine aggregate by volume with sufficient water to make a workable and plastic mix.

Proportion mortar for laying brick, concrete blocks or stone masonry at ½ part masonry cement, ½ part portland cement and 3 parts fine aggregate, either commercially produced masonry sand or FA-M, by volume with sufficient water to make a workable and plastic mix.

Do not use air-entraining agents in mortar for masonry work.

The Engineer may visually accept the sand used for mortar. The Engineer may visually accept any recognized brand of portland cement or masonry cement that is free of lumps.

c. Grout. Grout is defined as a mixture of cementitious materials with or without aggregate or admixtures to which sufficient water is added to produce a pouring or pumping consistency without segregation of the constituent materials and meeting the applicable specifications.

401.5 COMMERCIAL GRADE CONCRETE

If the Contract Documents allow the use of commercial grade concrete for designated items, then use a commercial grade mixture from a ready-mix plant approved by the Engineer.

The Engineer must approve the commercial grade concrete mixture. Approval of the commercial grade mixture is based on these conditions:

- All materials are those normally used for the production and sale of concrete in the vicinity of the project.
- The mixture produced is that normally used for the production and sale of concrete in the vicinity of the project.
- The mixture produced contains a minimum cementitious content of 6 sacks, 564 lbs, of cementitious per cubic yard of concrete.
- The water-cementitious ratio is as designated by the Engineer. The maximum water-cementitious ratio permitted may not exceed 0.55 pounds of water per pound of cementitious including free water in the aggregate.
- Type I, II, III, IP, IS, or IT cement may be used unless otherwise designated. Fly ash or GGBFS may be substituted for the required minimum cement content as specified in **subsection 401.3**. No additives other than air entraining agent will be allowed. The Contractor will not be required to furnish the results of strength tests when submitting mix design data to the Engineer.
- In lieu of the above, approved mix designs (including optimized) for all other grades of concrete, Grade 3.0 or above, are allowable for use as commercial grade concrete, at no additional cost to KDOT.

Exercise good engineering judgment in determining what equipment is used in proportioning, mixing, transporting, placing, consolidating and finishing the concrete.

Construct the items with the best current industry practices and techniques.

Before unloading at the site, provide a delivery ticket for each load of concrete containing the following information:

- Name and location of the plant.
- Time of batching concrete.
- Mix proportions of concrete (or a mix designation approved by the Engineer).
- Number of cubic yards of concrete batched.

Cure the various items placed, as shown in **DIVISION 700**.

The Engineer may test commercial grade concrete by molding sets of 3 cylinders. This is for informational purposes only. No slump or unit weight tests are required.

401.6 CERTIFIED CONCRETE

If KDOT inspection forces are not available on a temporary basis, the Engineer may authorize the use of concrete from approved concrete plants. Approval for this operation is based on certification of the plant and plant personnel, according to KDOT standards. KDOT's approval may be withdrawn any time that certification procedures are not followed.

The Engineer will not authorize the use of certified concrete for major structures such as bridges, RCB box bridges, RCB culverts, permanent main line and ramp pavement or other structurally, critical items.

Each load of certified concrete must be accompanied by a ticket listing mix proportions, time of batching and setting on revolution counter, total mixing revolutions and must be signed by certified plant personnel.

401.7 REQUIREMENTS FOR COMBINED MATERIALS

a. Measurements for Proportioning Materials.

(1) Cement. Measure cement as packed by the manufacturer. A sack of cement is considered as 0.04 cubic yards weighing 94 pounds net. Measure bulk cement by weight. In either case, the measurement must be accurate to within 0.5% throughout the range of use.

(2) Fly Ash. Fly ash proportioning and batching equipment is subject to the same controls as required for cement. Provide positive cut off with no leakage from the fly ash cut off valve. Fly ash may be weighed accumulatively with the cement or separately. If weighed accumulatively, weigh the cement first.

(3) Water. Measure the mixing water by weight or by volume. In either case, the measurement must be accurate to within 1% throughout the range of use.

(4) Aggregates. Measure the aggregates by weight. The measurement must be accurate to within 0.5% throughout the range of use.

(5) Admixtures. Measure liquid admixtures by weight or volume. If liquid admixtures are used in small quantities in proportion to the cement as in the case of air-entraining agents, use readily adjustable mechanical dispensing equipment capable of being set to deliver the required quantity and to cut off the flow automatically when this quantity is discharged. The measurement must be accurate to within 3% of the quantity required.

b. Testing of Aggregates.

(1) Production of On Grade Concrete Aggregate (OGCA). If OGCA is required, notify the Engineer in writing at least 2 weeks in advance of producing the aggregate. Include the source of the aggregate and the date production will begin. Failure to notify the Engineer, as required, may result in rejection of the aggregate for use as OGCA. Maintain separate stockpiles for OGCA at the quarry and at the batch site and identify them accordingly.

(2) Testing Aggregates at the Batch Site. Provide the Engineer with reasonable facilities at the batch site for obtaining samples of the aggregates. Provide adequate and safe laboratory facilities at the batch site allowing the Engineer to test the aggregates for compliance with the specified requirements.

KDOT will sample and test aggregates from each source to determine their compliance with specifications. Do not batch the concrete mixture until the Engineer has determined that the aggregates comply with the specifications. KDOT will conduct sampling at the batching site, and test samples according to the Sampling and Testing Frequency Chart in Part V. For QC/QA Contracts, establish testing intervals within the specified minimum frequency.

After initial testing is complete and the Engineer has determined that the aggregate process control is satisfactory, use the aggregates concurrently with sampling and testing as long as tests indicate compliance with specifications. When batching, sample the aggregates as near the point of batching as feasible. Sample from the stream as the storage bins or weigh hoppers are loaded. If samples can not be taken from the stream, take them from approved stockpiles, or use a template and sample from the conveyor belt. If test results indicate an aggregate does not comply with specifications, cease concrete production using that aggregate. Unless a tested and approved stockpile for that aggregate is available at the batch plant, do not use any additional aggregate from that source and specified grading until subsequent testing of that aggregate indicate compliance with specifications. When tests are completed and the Engineer is satisfied that process control is satisfactory, production of concrete using aggregates tested concurrently with production may resume.

c. Handling of Materials.

(1) Approved stockpiles are permitted only at the batch plant and only for small concrete placements or for maintaining concrete production. Mark the approved stockpile with an "Approved Materials" sign. Provide a suitable stockpile area at the batch plant so that aggregates are stored without detrimental segregation or contamination. At the plant, limit stockpiles of tested and approved coarse aggregate and fine aggregate to 250 tons each, unless approved for more by the Engineer. If mixed aggregate is used, limit the approved stockpile to 500 tons, the size of each being proportional to the amount of each aggregate to be used in the mix.

Load aggregates into the mixer such that no material foreign to the concrete or material capable of changing the desired proportions is included. When 2 or more sizes or types of coarse or fine aggregates are used on the same project, only 1 size or type of each aggregate may be used for any one continuous concrete placement.

(2) Segregation. Do not use segregated aggregates. Previously segregated materials may be thoroughly re-mixed and used when representative samples taken anywhere in the stockpile indicated a uniform gradation exists.

(3) Cement, Fly Ash and GGBFS. Protect cement, fly ash and GGBFS in storage or stockpiled on the site from any damage by climatic conditions which would change the characteristics or usability of the material.

(4) Moisture. Provide aggregate with a moisture content of $\pm 0.5\%$ from the average of that day. If the moisture content in the aggregate varies by more than the above tolerance, take whatever corrective measures are necessary to bring the moisture to a constant and uniform consistency before placing concrete. This may be accomplished by handling or manipulating the stockpiles to reduce the moisture content, or by adding moisture to the stockpiles in a manner producing uniform moisture content through all portions of the stockpile.

For plants equipped with an approved accurate moisture-determining device capable of determining the free moisture in the aggregates, and provisions made for batch to batch correction of the amount of water and the weight of aggregates added, the requirements relative to manipulating the stockpiles for moisture control will be waived. Any procedure used will not relieve the producer of the responsibility for delivering concrete of uniform slump within the limits specified.

(5) Separation of Materials in Tested and Approved Stockpiles. Only use KDOT Approved Materials. Provide separate means for storing materials approved by KDOT. If the producer elects to use KDOT Approved Materials for non-KDOT work, during the progress of a project requiring KDOT Approved Materials, inform the Engineer and agree to pay all costs for additional materials testing.

Clean all conveyors, bins and hoppers of any unapproved materials before beginning the manufacture of concrete for KDOT work.

401.8 MIXING, DELIVERY AND PLACEMENT LIMITATIONS

a. Concrete Batching, Mixing and Delivery. Batch and mix the concrete in a central mix plant, in a truck mixer or in a drum mixer at the work site. Provide plant capacity and delivery capacity sufficient to maintain continuous delivery at the rate required. The delivery rate of concrete during concreting operations must provide for the proper handling, placing and finishing of the concrete.

Seek the Engineer's approval of the concrete plant/batch site by the Engineer before any concrete is produced for the project. The Engineer will inspect the equipment, the method of storing and handling of materials, the production procedures and the transportation and rate of delivery of concrete from the plant to the point of use. The Engineer will grant approval of the concrete plant/batch site based on compliance with the specified requirements. The Engineer may, at any time, rescind permission to use concrete from a previously approved concrete plant/batch site upon failure to comply with the specified requirements.

Clean the mixing drum before it is charged with the concrete mixture. Charge the batch into the mixing drum such that a portion of the water is in the drum before the aggregates and cementitious. Uniformly flow materials into the drum throughout the batching operation. All mixing water must be in the drum by the end of the first 15 seconds of the mixing cycle. Keep the throat of the drum free of accumulations restricting the flow of materials into the drum.

Do not exceed the rated capacity (cubic yards shown on the manufacturer's plate on the mixer) of the mixer when batching the concrete. The Engineer may allow an overload of up to 10% above the rated capacity for central mix plants and drum mixers at the work site, provided the concrete test data for strength, segregation and uniform consistency are satisfactory, and no concrete is spilled during the mixing cycle.

Operate the mixing drum at the speed specified by the mixer's manufacturer (shown on the manufacturer's plate on the mixer).

Mixing time is measured from the time all materials, except water, are in the drum. If it is necessary to increase the mixing time to obtain the specified percent of air in air-entrained concrete, the Engineer will determine the mixing time.

If the concrete is mixed in a central mix plant or a drum mixer at the work site, mix the batch between 1 to 5 minutes at mixing speed. Do not exceed the maximum total 60 mixing revolutions. Mixing time begins after all materials, except water, are in the drum, and ends when the discharge chute opens. Transfer time in multiple drum mixers is included in mixing time. Mix time may be reduced for plants utilizing high performance mixing drums provided thoroughly mixed and uniform concrete is being produced with the proposed mix time. Performance of the plant must conform with Table A1.1 of ASTM C 94, Standard Specification for Ready Mixed Concrete. Five of the 6 tests listed in Table A1.1 must be within the limits of the specification to indicate that uniform concrete is being produced.

If the concrete is mixed in a truck mixer, mix the batch between 70 and 100 revolutions of the drum or blades at mixing speed. After the mixing is completed, set the truck mixer drum at agitating speed. Unless the mixing unit is equipped with an accurate device indicating and controlling the number of revolutions at mixing speed, perform the mixing at the batch plant and operate the mixing unit at agitating speed while travelling from the plant to the work site. Do not exceed 300 total revolutions (mixing and agitating).

If a truck mixer or truck agitator is used to transport concrete that was completely mixed in a stationary central mixer, agitate the concrete while transporting at the agitating speed specified by the manufacturer of the equipment (shown on the manufacturer's plate on the equipment). Do not exceed 200 total revolutions (additional re-mixing and agitating).

Provide a batch slip including batch weights of every constituent of the concrete and time for each batch of concrete delivered at the work site, issued at the batching plant that bears the time of charging of the mixer drum with cementitious and aggregates. Include quantities, type, product name and manufacturer of all admixtures on the batch ticket.

On paving projects and other high volume work, the Engineer will determine the haul time, and whether tickets will be required for every load. Thereafter, random checks of the loads will be made.

When non-agitating equipment is used for transportation of concrete, provide approved covers for protection against the weather when required by the Engineer.

Place non-agitated concrete within 30 minutes of adding the cement to the water.

Place concrete within the time and temperature conditions shown in

TABLE 401-9.

TABLE 401-9: AMBIENT AIR TEMPERATURE AND AGITATED CONCRETE		
PLACEMENT TIME		
T = Ambient Air Temperature at Time of Batching (°F)	Specimen Age Time limit agitated concrete must be placed within, after the addition of cement to water (hours)	Admixtures
T < 75	1 ½	None
75 ≤ T	1	None
75 ≤ T < 90	1 ½	Set Retarder

In all cases, if the concrete temperature at time of placement is 90°F or above, or under conditions contributing to quick stiffening of the concrete, place the concrete within 45 minutes of adding the cement to the water. Do not use concrete that has developed its initial set. Regardless of the speed of delivery and placement, the Engineer will suspend the concreting operations until corrective measures are taken, if there is evidence that the concrete can not be adequately consolidated.

Weather conditions and the use of admixtures can effect the set times for the concrete. Do not use the time limits and total revolutions as the sole criterion for rejection of concrete. Exceed the time limits and total revolutions only after demonstrating that the properties of the concrete can be improved. Evaluation of the consistency and workability should be taken into consideration. However, concrete that cannot be adequately consolidated should be rejected.

Adding water to concrete after the initial mixing is prohibited, with this exception: If the concrete is delivered to the work site in a truck mixer, the Engineer will allow water (up to 2 gallons per cubic yard) be withheld from the mixture at the batch site, and if needed, added at the work site to adjust the slump to the specified requirements. Determine the need for additional water as soon as the load arrives at the construction site. Use a calibrated water-measuring device to add the water, and add the water to the entire load. Do not add more water than was withheld at the batch site. After the additional water is added, turn the drum or blades an additional 20 to 30 revolutions at mixing speed. The Engineer will supervise the adding of water to the load, and will allow this procedure only once per load.

b. Placement Limitations.

(1) Placing Concrete at Night. Do not mix, place or finish concrete without sufficient natural light, unless an adequate, artificial lighting system approved by the Engineer is provided.

(2) Placing Concrete in Cold Weather. Unless authorized by the Engineer, discontinue mixing and concreting operations when the descending ambient air temperature reaches 40°F. Do not begin concreting operations until an ascending ambient air temperature reaches 35°F and is expected to exceed 40°F.

If the Engineer permits placing concrete during cold weather, aggregates may be heated by either steam or dry heat system before placing them in the mixer. Use an apparatus that heats the mass uniformly and is so arranged as to preclude the possible occurrence of overheated areas which might injure the materials. Do not heat aggregates directly by gas or oil flame or on sheet metal over fire. Aggregates that are heated in bins, by steam-coil or water-coil heating, or by other methods not detrimental to the aggregates may be used. The use of live steam on or through binned aggregates is prohibited. Unless otherwise authorized, maintain the temperature of the mixed concrete between 50 to 90°F at the time of placing. Do not, under any circumstances, continue concrete operations if the ambient air temperature is less than 20°F.

If the ambient air temperature is 35°F or less at the time the concrete is placed, the Engineer may require that the water and the aggregates be heated to between 70 and 150°F.

Do not place concrete on frozen subgrade or use frozen aggregates in the concrete.

As a general rule, do not use fly ash, GGBFS or blended cement between the dates of October 1 and April 1. However, if weather conditions are unseasonably warm, the Engineer may waive this rule on a day by day basis. The Engineer will consider the nighttime temperatures, the extended weather forecast and the performance and setting of the mix when deciding whether to waive the restrictions.

401.9 INSPECTION AND TESTING

Unless otherwise designated in the Contract Documents or by the Engineer, obtain samples of fresh concrete for the determination of slump, weight per cubic yard and percent of air from the final point of placement.

The Engineer will cast, store and test strength test specimens in sets of 3.

KDOT will conduct the sampling and test the samples according to **DIVISION 2500** and the Sampling and Testing Frequency Chart in Part V. For QC/QA Contracts, establish testing intervals within the specified minimum frequency.

The Engineer will reject concrete that does not comply with specified requirements.

The Engineer will permit occasional deviations below the specified cementitious content, if it is due to the air content of the concrete exceeding the designated air content, but only up to the maximum tolerance in the air content.

The Contractor has the option to control air content for PCCP by either the Non QC/QA Approach or the QC/QA Approach (see **subsection 401.10** or **401.11**, the Contractor's Quality Control Plan for PCCP shall designate which approach will be used). Continuous operation below the specified cementitious content for any reason is prohibited.

As the work progresses, the Engineer reserves the right to require the Contractor to change the proportions if conditions warrant such changes to produce a satisfactory mix. Any such changes may be made within the limits of the specifications at no additional compensation to the Contractor.

401.10 AIR-ENTRAINED CONCRETE PAVEMENT (NON-QC/QA APPROACH)

a. Air Content for PCCP. Provide an air content that complies with **subsection 401.3 h**.

Using fresh concrete, the Engineer will determine the air void spacing factor using the AVA according to the manufacturer's requirements. Prequalify mixtures by either the laboratory option or the field option. Contact the Engineer to arrange testing by the AVA.

b. Laboratory Prequalification. Prepare a trial mix using a drum-type mixer according to AASHTO T 126 using all of the materials in the proportions, except the air entraining agent, contemplated for use in the field. Laboratory mixes require more air entraining agent than is needed in the field. Consolidate a sample in the unit weight bucket by vibration according to KT-20. Obtain 3 samples from the unit weight bucket for testing by the AVA. Valid results must have a minimum of 2 spacing factor readings within a range of 0.0025 inch. Test the third sample if the first two do not meet this criteria. Determine the air content of the trial mix by KT-19 (Roll-a-meter) or KT-18 (pressure meter) calibrated to yield the same result. Calculate a target percent air content at a maximum air void spacing factor of 0.01 inch using the equation in **subsection 401.3h**, when applicable.

c. Field Prequalification. Previous data on air content and air void spacing factors may be submitted as a basis of prequalification for a mixture if the same materials, proportions, equipment and procedures are used. The only exception allowed is a change in coarse aggregate sources if the gradation is similar. The new aggregate source is required to meet the same qualifications as the previous aggregate source. Alternately, produce a trial batch at a minimum air temperature of 60°F using the batch plant and project materials. Test for air content by the procedure specified under laboratory prequalification. Correlate this air content to the average of at least 2 valid AVA test results. Valid AVA results have a maximum range of 0.0025 inch.

When necessary, calculate a target percent air content at a maximum air void spacing factor of 0.01 inch, using the equation in **subsection 401.3h**.

d. Field Verification. Coordinate with the Engineer so production samples may be obtained behind the paver to establish the target air content on the first paving day. Produce concrete using the same materials and proportions that were used in the prequalification mixture. Adjustments may be approved in the dosage of air entraining agent and a 5% adjustment may be approved in the water-cementitious ratio. Samples will be taken both in the path of a vibrator and the gap between vibrators. Perform the test for air content at the delivery site of the concrete KT-19 (Roll-a-meter) or KT-18 (pressure meter), calibrated to yield the same result. Make adjustments in the proportions, types of material or the operation to establish a satisfactory, target air content.

e. Control of the Air Content During Paving Operations. Maintain an air content behind the paver as determined by KT-19 or KT-18, which meets **subsection 401.3h**. Maintain all production parameters established during field verification. The dosage of air-entraining agent may be varied to control the air content. Five percent adjustments will be permitted to the cementitious content and the water-cementitious ratio. With AVA testing, 5% adjustments will be permitted to the aggregate proportions, as well as any adjustment to the water reducer. Comply with all specifications regarding production of fresh concrete. For all mainline paving, test the concrete at the beginning of the day's operation and approximately every 2 hours thereafter for air content. For all other slipformed pavement, test for air content at the beginning of a day's operation and approximately every 4 hours thereafter. Test hand placements for air content at least once daily.

Determine the air loss due to paving operations once in the AM and once in the PM. Determine the difference between the air content from concrete sampled before the paver, and concrete sampled behind the paver. QC/QA samples may be obtained in front of the paver and then corrected subtracting the difference determined during that ½ days production. Loss of air due to paving operations may adversely affect the spacing factor.

Failure to maintain the minimum required air content will result in suspension of operation. Take immediate steps to increase the air content above the minimum values stated in **subsection 401.3h**.

Other similar designs using higher cementitious contents and the same admixture types and dosage (with the same or lower water-cementitious ratio) may be used in limited areas such as crossovers, etc. Unauthorized changes in any aspect of production are cause for rejection of the pavement.

Random checks of the air void spacing factor of the concrete in the path and gap of the vibrators will be conducted by the Engineer to verify a maximum spacing factor of 0.01 inch at the measured air content.

APPENDIX A - Non-Mandatory Information

a. Concrete for Structures. Design field blended cement concrete meeting the applicable requirements for Volume of Permeable Voids, Surface Resistivity, or Rapid Chloride Permeability using the parameters described in **subsection 401.3b**.

TABLE 401-A1: CONCRETE FOR STRUCTURES		
Grade of Concrete: Type of Aggregate (DIVISION 1100)	lb. of Cementitious per yd ³ of Concrete, minimum	lb. of Water per lb. of Cementitious, maximum ¹
Grade 5.0:		
Mixed aggregate with 30% or more (by weight) on the No. 4 sieve	639	0.36
Coarse and Fine Aggregate	602	0.36
MA-2 with 45% or more (by weight) on the No. 4 sieve	602	0.36
Grade 4.5:		
Mixed aggregate with less than 30% (by weight) on the No. 4 sieve	696	0.42
Mixed aggregate with 30% or more (by weight) on the No. 4 sieve	639	0.42
Coarse and Fine Aggregate	602	0.42
MA-2 with 45% or more (by weight) on the No. 4 sieve	602	0.42
Grade 4.0²:		
Mixed aggregate with less than 30% (by weight) on the No. 4 sieve	696	0.46
Mixed aggregate with 30% or more (by weight) on the No. 4 sieve	639	0.46
Coarse and Fine Aggregate	602	0.46
MA-2 with 45% or more (by weight) on the No. 4 sieve	602	0.46
Grade 3.0 and Grade 3.5:		
Mixed aggregate with less than 30% (by weight) on the No. 4 sieve	639	0.48
Mixed aggregate with 30% or more (by weight) on the No. 4 sieve	602	0.48
Coarse and Fine Aggregate	564	0.48
MA-2 with 45% or more (by weight) on the No. 4 sieve	564	0.48
Grade 2.5:		
All Aggregates	526	0.55

¹Maximum limit of lb. of water per lb. of cementitious includes free water in aggregates, but excludes water of absorption of the aggregates.

²Take measures to control bleeding on Grade 4.0 concrete for drilled shafts through the use of a lower w/c ratio, the addition of air, or any other proven method to control bleeding.

b. Air-Entrained Concrete for Structures. Design air-entrained concrete for structures meeting the applicable requirements for Volume of Permeable Voids, Surface Resistivity, or Rapid Chloride Permeability, according to **TABLE 401-A2**.

TABLE 401-A2: AIR-ENTRAINED CONCRETE FOR STRUCTURES			
Grade of Concrete Type of Aggregate (DIVISION 1100)	lb. of Cementitious per yd ³ of Concrete minimum	lb. of Water per lb. of Cementitious, maximum ⁵	Percent of Air by Volume ⁶
Grade 6.0(AE)(SA)²:			
Mixed aggregate with 30% or more (by weight) on the No. 4 sieve	752	0.35	6.5±1.5
Coarse and Fine Aggregate	752	0.35	6.5±1.5
MA-2 with 45% or more (by weight) on the No. 4 sieve	700	0.35	6.5±1.5
Grade 5.0(AE), Grade 5.0(AE)(SW)¹, Grade 5.0(AE)(SA)², Grade 5.0(AE)(AI)³ and Grade 5.0(AE)(PB)⁴:			
Mixed aggregate with 30% or more (by weight) on the No. 4 sieve	639	0.35	6.5±1.5
Coarse and Fine Aggregate	602	0.35	6.5±1.5
MA-2 with 45% or more (by weight) on the No. 4 sieve	602	0.35	6.5±1.5
Grade 4.5(AE), Grade 4.5(AE)(SW)¹, Grade 4.5(AE)(SA)², and Grade 4.5(AE)(AI)³:			
Mixed aggregate with less than 30% (by weight) on the No. 4 sieve	696	0.40	6.5±1.5
Mixed aggregate with 30% or more (by weight) on the No. 4 sieve	639	0.40	6.5±1.5
Coarse and Fine Aggregate	602	0.40	6.5±1.5
MA-2 with 45% or more (by weight) on the No. 4 sieve	602	0.40	6.5±1.5
Grade 4.0(AE), Grade 4.0(AE)(SW)¹, Grade 4.0(AE)(SA)², and Grade 4.0(AE)(AI)³:			
Mixed aggregate with less than 30% (by weight) on the No. 4 sieve	696	0.44	6.5±1.5
Mixed aggregate with 30% or more (by weight) on the No. 4 sieve	639	0.44	6.5±1.5
Coarse and Fine Aggregate	602	0.44	6.5±1.5
MA-2 with 45% or more (by weight) on the No. 4 sieve	602	0.44	6.5±1.5

Grade 3.0(AE) and Grade 3.5(AE):			
Mixed aggregate with less than 30% (by weight) on the No. 4 sieve	639	0.46	6.5±1.5
Mixed aggregate with 30% or more (by weight) on the No. 4 sieve	602	0.46	6.5±1.5
Coarse and Fine Aggregate	564	0.46	6.5±1.5
MA-2 with 45% or more (by weight) on the No. 4 sieve	564	0.46	6.5±1.5
Grade 2.5(AE):			
All Aggregates	526	0.53	6.5±1.5

¹Grade xx (AE)(SW) - Structural concrete with select coarse aggregate for wear.

²Grade xx (AE)(SA) - Structural concrete with select coarse aggregate for wear and absorption.

³Grade xx (AE)(AI) - Structural concrete with select coarse aggregate for wear and acid insolubility.

⁴Grade xx (AE)(PB) - Structural concrete with select aggregate for use in prestressed concrete beams.

⁵Maximum limit of lb. of water per lb. of cementitious includes free water in aggregates, but excludes water of absorption of the aggregates.

⁶The maximum air content is 10%. Take immediate steps to get the air down whenever the air content exceeds 8%.

c. Silica Fume Modified Concrete. When silica fume is specified in the Contract Documents, meet the mix design and production requirements in **TABLE 401-A3**.

TABLE 401-A3: SILICA FUME CONCRETE CRITERIA	
lbs. of Cement per cu. yd. maximum	595
lbs. of Silica Fume per cu. yd., maximum	30
lbs. of water per lbs. of (Cement + Silica Fume), Max	0.40
Percent of Air by Volume	6.5±1.5 ¹
Maximum 56 day Rapid Chloride Permeability AASHTO T-277 ²	1000 coulombs
or Maximum 28 day Permeable Voids KT-73 ²	9.50%
or Minimum 28 day Surface Resistivity KT-79 ²	27.0 kΩ-cm

¹As Determined by KT-19 (Rollometer). A regularly calibrated air meter may be used for production with random verification by the rollometer. See KT-19 for special requirements when using the rollometer with high cement concretes or mixtures with midrange water reducers or plasticizers.

²Provide Silica Fume Modified Concrete with either a maximum 28-day Volume of Permeable Voids of 9.5% as per KT-73, a minimum 28-day Surface Resistivity of 27.0 kΩ-cm as per KT-79, or a maximum 56-day Rapid Chloride Permeability of 1000 Coulombs as per AASHTO T-277. Submit accelerated cure procedures for the Engineer's approval.

APPENDIX B - Non-Mandatory Information

Suggested Guidelines for Meeting KDOT's Permeability Specifications

General

Water and chlorides permeate through the mortar and paste of the concrete mixes. They do not readily permeate through the larger aggregates. Permeability can be improved by decreasing the mortar and paste of the concrete mix and increasing the coarse aggregate portions.

The use of optimized mix designs, blended cements, and/or supplementary cementitious materials (SCMs) can reduce the permeability of concrete. The latest revisions of **SECTION 1102**, Aggregates for Concrete describes optimized aggregate gradations for concrete mixes. Additional testing for alkali silica reaction (ASR) is required when SCMs are used in concrete as per the latest revision of **SECTION 401**. The amount of SCMs required to pass the ASR testing may be different than the amount required to comply with the permeability specifications. SCMs may also lower the necessary water cement (w/c) ratio and may slow set times and strength gain.

Optimizing the coarse aggregate gradations can decrease permeability. This includes mixes with more than 60% retained on the # 8 sieve and gradations with fineness modulus above 4.75. A fineness modulus of over 5.0 can yield even better results. Use the largest practical nominal maximum size aggregate allowed.

In general, keeping the w/c ratio below 0.43 may help meet the permeability specifications, as may lower cementitious content mixes when using Type I/II cements. These two properties control the paste in the mix. Concrete mixes with less than 25% paste (as displayed on KDOT Form 694) are more likely to pass the permeability specifications. Acceptable concrete can be mixed with paste contents of 23% or lower. Water cement ratios below 0.39 often do not provide enough water for all constituents to properly react, especially when admixtures are used, and may be counterproductive. High early strength concrete mixes using Type III cement and higher cementitious contents have also been able to pass the Standard Permeability requirements because of their low w/c ratios.

In general, the use of water reducers is helpful in reducing the paste content. Material compatibilities, following the admixture suppliers' recommendations for dosage rates, and the order of introduction of the chemicals into the mix are paramount to meeting KDOT specifications. Contractors should work with their admixture suppliers to find an admixture that works well with their combination of materials.

Changes made to an approved mix design will change the permeability, especially additional water, or redosing water that was withheld from the mix at a concrete plant. It is also recommended that concrete producers verify their mixes with a minimum of 3 cubic yards after doing their laboratory mix designs.

Standard Permeability Concrete (SPC)

Requirements:

Volume of Permeable Voids 12.0% max, or
Surface Resistivity 9.0 kΩ-cm min, or
RCPT 3000 Coulombs max.

The SPC specification may be met without the use of optimized mix designs, blended cements, or SCMs. With certain aggregates, 25% slag cement will be required to pass the ASR testing. With other aggregates, a minimum of 30% slag cement by weight of total cementitious materials is usually needed. Some fly ashes require a

minimum of 18% to 20% of the total cementitious material to pass the ASR test. Class C fly ash will react differently than Class F fly ash.

Some people believe that lower absorption aggregates have a better chance of meeting the permeability specification, but higher absorption aggregates have been used in concrete mixes utilizing these guidelines and have met the SPC specifications. KDOT has found that the properties of the concrete are often more important than the absorption of the aggregate when meeting this specification.

Moderate Permeability Concrete (MPC)

Requirements:

Volume of Permeable Voids 11.0% max, or
Surface Resistivity 13.0 k Ω -cm min, or
RCPT 2000 Coulombs max.

Concrete mixes for MPC will require aggregates with a minimum Soundness of 0.95, a maximum LA Wear of 40, and a minimum Acid Insoluble Residue of 85%. These aggregates, by nature, are harder aggregates with very low absorption. MPC may rely more heavily on optimized gradations, blended cements or SCMs in order to meet the specification. Consideration could be given to ternary blends of cementitious materials, using more than one SCM, or combining a blended cement with an additional SCM. Combinations of 25% to 30% slag cement with as little as 10% to 25% Class C fly ash have been very effective in keeping permeabilities below the level required for MPC. Incorporation of 20% Class F Fly Ash will often satisfy the requirements of the MPC specification.

Low Permeability Concrete

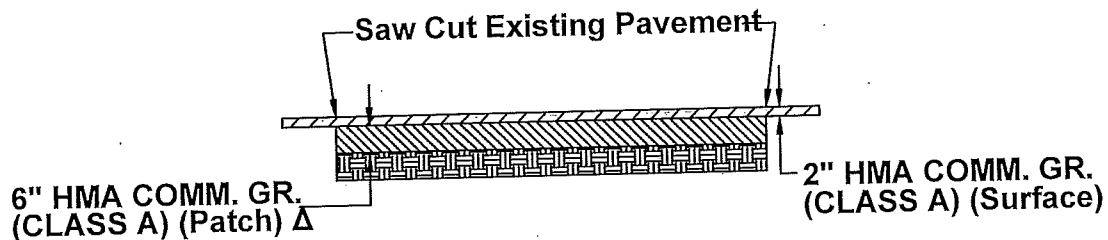
Requirements:

Volume of Permeable Voids 9.5% max, or
Surface Resistivity 27.0 k Ω -cm min, or
RCPT 1000 Coulombs max.

LPC will also use harder aggregates with very low absorption. These mixes must be optimized with the MA-6 gradation. Mix designs with 5% silica fume and 95% Type I/II cement often meet the LPC requirements. These mixes have traditionally been known as silica fume concrete. Ternary mix designs are useful in meeting these requirements. Consider using 3% to 5% silica fume with 25% to 30% slag cement, or 25% to 30% slag cements with 10% to 25% Class C fly ash. Class F fly ash alone may also be effective in reducing the permeability to these levels.

Contact KDOT's Bureau of Research or the District Office for additional guidance in meeting the Permeability Specifications.

HMA PAVEMENT PATCHING DETAIL



Typical Detail for Patching

Notes:

1. THE SUBGRADE SHALL BE THOROUGHLY AND UNIFORMLY RECOMPACTED BY HAND TAMPING AND ROLLING.
 2. THE BITUMINOUS MIXTURE SHALL BE DEPOSITED IN UNIFORMLY SPREAD LAYERS NOT TO EXCEED 3" IN THICKNESS AND EACH LAYER SHALL BE THOROUGHLY COMPACTED BY A SELF PROPELLED VIBRATORY STEEL DRUM ROLLER.
 3. BITUMINOUS MIX USED FOR PAVEMENT PATCHING WILL BE PAID PER TON OF ACTUAL MATERIAL PLACED AND ACCEPTED.
 4. SAW CUTS WILL BE SUBSIDIARY TO HMA- COMM. GR. (CLASS A) (PATCH) CONSTRUCTION REQUIREMENTS SHALL BE AS STATED IN SECTION 833 OF THE 2007 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
 5. THE LOCATIONS OF BITUMINOUS PAVEMENT PATCHING WILL BE DETERMINED BY THE ENGINEER AFTER ANY MILLING OPERATIONS ARE COMPLETED.
 6. EMULSIFIED ASPHALT (SS-1HP) FOR TACK IS REQUIRED ON ALL SURFACES AT PATCH LOCATIONS PRIOR TO PLACING HMA (PATCH) MATERIAL. A LIGHT COAT OF SS-1HP IS REQUIRED BETWEEN SUCCESSIVE LIFTS OF HMA (PATCH) MATERIAL. THIS WORK IS SUBSIDIARY TO HMA (PATCH).
- Δ THE ACTUAL DEPTH OF HMA (PATCH) MAY BE ADJUSTED BY THE ENGINEER TO ACCOMMODATE CONDITIONS FOUND DURING CONSTRUCTION.



Douglas County Public Works

1242 Massachusetts
Lawrence, Kansas 66044

PROJECT NO.

PROJECT NAME

DESIGNED BY

N.P

DRAWN BY

L.H.

HMA PAVEMENT PATCHING DETAIL

Memorandum

City of Lawrence and Douglas County Planning & Development Services

TO: Board of County Commissioners

CC: Craig Weinaug, County Administrator

FROM: Mary Miller, City/County Planner

Date: February 2, 2016

RE: CUP-15-00613 Calcio Village, Additional Information related to wells, lighting, and road improvements (revised memo*)

**This memo has been revised to include the two conditions that the Planning Commission added at their January 25, 2016 meeting regarding public notice for site plans that require County Commission approval and a vegetated buffer on the east side with Phase 2. These items were omitted from the first memo in error.*

The Planning Commission voted unanimously at their January 25, 2016 meeting to recommend approval of this CUP. The Planning Commission also directed staff to research the well permitting process to determine if the addition of the well for the soccer facility would negatively impact the residential wells in the area. The first section of this memo contains the information from the water well research. The second section discusses the lighting information and area road improvements and contains revised conditions. Conditions were revised as a result of the additional information and changes which the applicant made to the CUP plan, revised Feb 4, 2016. The revised conditions are listed on page

WELL RESEARCH

The Lawrence-Douglas County Health Department issues permits for residential wells. The property owner submits a well application as well as a \$250 permit fee. The Health Department reviews the application to insure the proposed well location meets all the setback distance requirements from the property lines, future buildings, driveways, septic systems, etc.

The Health Department indicated they do not evaluate the possible impact of a well on the groundwater level; however, they noted that the amount of water the soccer facility estimated they would use (4,280 gallons per month) is similar to a single-family residence (typically between 6,000 and 7,500 gallons per month). The soccer facility's water estimate was based on having 4 employees on the site each day they are open, 40 visitors per day when they were open, and being open 20 days a month. Their reliance on well water usage will decrease when rural water is available.

Katie Tietzort, KS Department of Agriculture Division of Water Resources (DWR) Water Appropriation Program provided information on the wells. She is the Water Commissioner for the eastern third of Kansas. Ms. Tietzort informed me that the DWR would not require a permit for the well, since it would be used for 'domestic' purposes such as restrooms and cleaning. A permit from the DWR is required; however, for any irrigation use of water on athletic fields (a permit is not required for domestic irrigation of less than 2 acres of lawns, gardens, or orchards). A permit from the Kansas Division of Water Resource will be required for the use of the pit pond water for irrigation.

Ms. Tietzort noted that, by policy, a new well is not allowed to cause a problem with a previous well. If the new well was found to be affecting the existing wells, the existing wells would be protected. (She clarified that this applies to all wells within the state system, regardless of what agency they are permitted through). The DWR would conduct an investigation to determine if the impairment occurring between the wells is caused by the new well. If so, the owner of the new well would be required to reduce their use, or stop the use from their well completely, depending on what action resolves the impairment to the earlier well.

She noted that individual domestic wells have not typically caused problems with other existing wells, with the exception of wells on the Ogallala Aquifer in the western part of the state.

Ms. Tietzort indicated that the proposed domestic well at the soccer facility, with an estimated use of approximately 4,300 gallons of water a month, is not expected to have any impact on other domestic wells in the area.

LIGHTING INFORMATION

One field, the northeast field, is proposed to be lit for night play. There will be four 70 ft tall poles, one at each corner of the field. Each pole will have 9 of the light fixtures shown below:

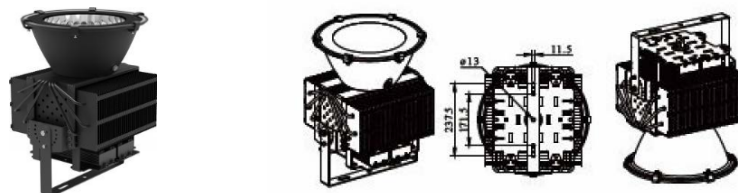


Figure 1. Proposed LED light fixtures

The proposed light fixtures do not include shields or visors to reduce glare to off-site properties. Glare is defined as the discomfort experienced when looking at a bright light source. The following are examples of different types of lighting for outdoor sports and the resulting glare.

Full cutoff lighting, shown in Figure 2, is feasible only where it is possible to locate the light poles and fixtures throughout the area, as the spread of light is relatively limited. Unshielded lights can result in the glare as shown in the image on the right. With the use of shields and visors the glare can be reduced to an acceptable level, although not eliminated, as seen in Figure 3.



Full cutoff lighting produces more useable illumination.



Floodlighting produces uncontrolled light.

Figure 2. Examples of sports lighting: full cut-off on the left, and unshielded floodlights on the right.



Figure 3. Example of reduced glare from shielded sports lighting.



Figure 4. Examples of sheilding

In staff's opinion, at a minimum, the light fixtures should be shielded in the same manner as the lights at various sports fields in the City of Lawrence. A shield, similar to those shown in Figure 3, should be installed on each light fixture to prevent glare.

In addition, a note should be added to the plan which limits the hours the lights may be used: *The exterior athletic fields shall not be illuminated after 10:00 PM.*

ROAD REPAIRS

The surface of N 1300 Road and E 1750 Road have both received damage from the construction traffic for the South Lawrence Trafficway (SLT). KDOT has a contract to repair the township roads to pre-SLT condition with the completion of the SLT. KDOT anticipates having the SLT and the township road repairs completed in November 2016. To insure the road repairs are complete before the facility is in operation, staff recommends the following condition:

The soccer facility will not be open for training or games until the township roads (N 1300 Road and E 1750 Road) have been repaired to pre-SLT conditions.

SUMMARY

The well being proposed on the soccer facility would use less water than a typical single-dwelling residence. The Kansas Division of Water Resources indicated the new well was not expected to cause an issue for other wells in the area. If the new well does impact the existing wells, the DWR protection provisions would apply.

The following additional conditions are proposed related to lighting and road improvements:

- The soccer facility shall not be open for training or games until the township roads (N 1300 Road and E 1750 Road) have been repaired to pre-SLT conditions.
- The exterior athletic fields shall not be illuminated after 10:00 PM.
- The athletic field lights will utilize shields/visors, that have been approved by Planning, to reduce glare.

The applicant provided a revised plan on February 4, 2016 which addressed several of the conditions recommended by the Planning Commission (attached with this memo). The following list of revised conditions includes those which have been removed/added in response to the road improvements and means to reduce glare with sports lighting as well as those which have been removed as a result of changes on the Feb. 4 revised plan. Deleted text is shown as ~~struck-through~~, and new text in **bold** print.

REVISED CONDITIONS:

1. The Conditional Use shall be administratively reviewed every 5 years.
2. **The soccer facility shall not be open for training or games until the township roads (N 1300 Road and E 1750 Road) have been repaired to pre-SLT conditions.**
3. **The Planning Office will provide mailed notice to all property owners within 1000 ft of the subject property when a site plan requiring County Commission approval is submitted. (PC added condition)**
4. ~~Provision of additional lighting information to insure the exterior lighting is designed to prevent off-site glare.~~
4. **The athletic field lights will utilize shields/visors, that have been approved by the Planning Office, for glare reduction.**
5. **A vegetated noise buffer will be installed on the east side of the property with the development of Phase 2. (PC added condition)**
6. Provision of a revised CUP plan with the following changes:
 - a. Label the distance from the buildings to the existing E 1750 Rd right-of-way and the future right-of-way for the extension of N 1300 Rd to insure required setbacks are provided.
 - b. ~~Clearly show the location of the chemical toilets.~~
 - c. ~~Add 2 additional ADA accessible spaces in the large parking area for a total of 6 spaces.~~
 - d. ~~Add the following general notes:~~
 - i. ~~Chemical toilets will be used and potable water brought to the site for visitors use until a public water supply is available. Restrooms shall be installed in the training/concession building when the site is connected to public water.~~

- ~~ii. Significant improvements to the facility, following the construction of 31st Street, will require the addition of landscape screening along the north side of the parking areas.~~
- ~~iii. The exterior athletic fields shall not be illuminated after 10:00 PM.~~

Revised Conditions (changes incorporated)

1. The Conditional Use shall be administratively reviewed every 5 years.
2. The soccer facility shall not be open for training or games until the township roads (N 1300 Road and E 1750 Road) have been repaired to pre-SLT conditions.
3. The Planning Office will provide mailed notice to all property owners within 1000 ft of the subject property when a site plan requiring County Commission approval is submitted.
4. The athletic field lights will utilize shields/visors, that have been approved by the Planning Office, for glare reduction.
5. A vegetated noise buffer will be installed on the east side of the property with the development of Phase 2.
6. Provision of a revised CUP plan with the following change:
 - a. Label the distance from the buildings to the existing E 1750 Rd right-of-way and the future right-of-way for the extension of N 1300 Rd to insure required setbacks are provided.

There would be 5 soccer fields plus smaller training areas. A pit pond would be installed for irrigating the fields and there are plans to light one of the fields right away and the possibility of more in the future. Please see proposed site plan for other detailed information."

KEY POINTS

- The proposal is for Phase 1 of a youth sports soccer facility. A later phase may utilize the remainder of the 80 acre parcel.
- Plans for the extension/improvement of E 31st Street (N 1300 Road) include widening the road and relocating it to the south. The plan notes the proposed location and right-of-way width for the new road and the facility has been designed to accommodate it.

ATTACHMENT

- A --CUP Plans

OTHER ACTION REQUIRED

- Approval of the Conditional Use by the Board of County Commissioners.
- Applicant shall obtain a permit for the Conditional Use from the Zoning and Codes Office prior to commencing the use.
- Applicant shall obtain building permits from the Zoning and Codes Office prior to construction of the structures.

PUBLIC COMMENT

- No public comment was received prior to printing this report.

GENERAL INFORMATION

Current Zoning and Land Use: A (Agricultural), V-C (Valley Channel), and F-F (Floodway Fringe Overlay) Districts; *Agriculture*.

Surrounding Zoning and Land Use: To the west: A (Agricultural) and F-F (Floodway Fringe Overlay) Districts; *Agriculture* and K10 Highway. Further to the west is an area designed as future City parkland and a parcel which has been annexed into the City of Lawrence and developed with a sanitary sewer pump station. This property is zoned GPI (City-General Public and Institutional Use).

To the north and south: A (Agricultural), V-C (Valley Channel), and F-F (Floodway Fringe Overlay) Districts; *Agriculture* throughout and the Wakarusa River Corridor to the south. Parcel zoned I-2 (Light Industrial) District to the northwest has been developed as KDOT right-of-way.

To the east: V-C (Valley Channel), F-F and F-W (Floodway Fringe and Floodway Overlay) Districts; *Agriculture* and the Wakarusa River Corridor. A recreational use, a ski lake is located to the northeast near K10 Highway.

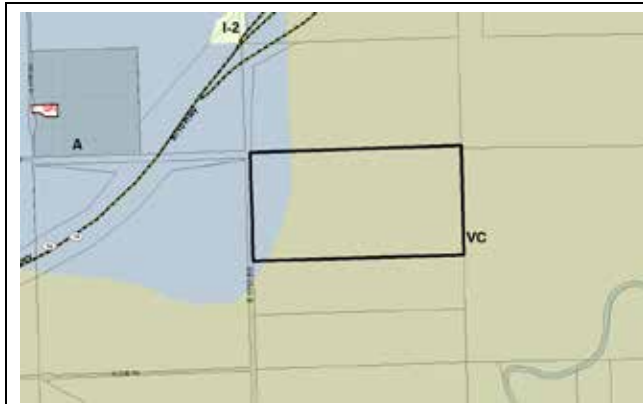


Figure 1a. Zoning of the area: A (Agricultural), V-C (Valley Channel).

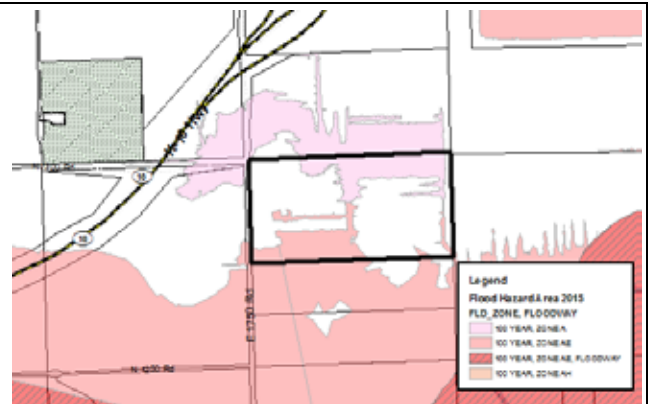


Figure 1b. Floodplain in the area.



Figure 1c. Land Use in the area.

Summary of Request

Jambers Futbol Inc. is a non-profit organization that is working with the owner of the subject property to develop a youth soccer complex. The applicant indicated that it is difficult to schedule training at the City Youth Soccer Complex. The City Parks and Recreation Department indicated that their agreement with Sporting Kaw Valley is not exclusive but they do have first scheduling rights, which can result in fairly limited space for other users during the spring and fall.

The complex would have 5 full-sized playing fields along with 4 skill training areas and a 180 ft x 120 ft sand court for specialized training. Two structures will be constructed on the site, a 60 ft x 100 ft storage building and a 60 ft x 100 ft concession building for offices and staff/group

meetings. The offices will be used only when the facility is in use and a maximum of 3 staff members will be on site. Restrooms are planned in this building when rural water is available and chemical toilets will be used until then. A parking area with 20 parking spaces is located to the north of the storage building and a larger parking area, with 200 parking spaces, is located to the east of the concession/meeting building. The access drive and parking areas will be surfaced with recycled asphalt and gravel. A grassed overflow parking area with a capacity of 74 vehicles is located to the east of the parking area.

This will be primarily a training facility with adults playing on weekends and children during the week. A local school will use the facility for their matches, approximately 18 games per year. As this is primarily a training facility, few spectators are expected and the school will use busses for their athletes.

The proposed use is permitted when approved with a Conditional Use Permit, as noted below:

12-319-4.02 Athletic field or Baseball Field

The proposed use has been reviewed with the following criteria provided in Section 12-319-1.02 of the Zoning Regulations:

I. ZONING AND USES OF PROPERTY NEARBY

Nearby property is zoned A (Agricultural), V-C (Valley Channel), and FF (Floodway Fringe Overlay) Districts and is used primarily for *Agriculture*. Other sports/recreation uses (a lake which is used by a ski club and a driving range/chip and putt golf course) are located in V-C District to the east. An approximately 40 acre parcel to the west is designated as a future City park. A one-acre parcel in this park area was annexed into the City of Lawrence through an island annexation, rezoned to GPI (General Public and Institutional Uses) District and developed with a City sanitary sewer pump station. (Figure 1c)

Staff Finding –Surrounding land uses are predominantly agricultural in nature. There are recreational uses to the northeast (ski lake and driving range/golf course) as well as future City park and a City utility to the northwest. The Wakarusa River Corridor and associated floodplain is located in the southern portion of the area.

II. CHARACTER OF THE AREA

The area is bounded on the north by the K10 Highway and on the south by the Wakarusa River Corridor and floodplain. The recently constructed K10 bypass crosses through the area from the west and connects to K10 Highway to the north of the subject property. Agriculture is the predominate land use, and there are 2 existing sports/recreation uses in the area: a ski lake and the Eudora driving range/putt and chip golf course located adjacent to K10 Highway. The proposed recreational use would be compatible with the character of the area.

Staff Finding – The area is rural in character with agriculture being the predominate land use. The area also contains other sports/recreational facilities: ski lake and driving range/golf course. The K10 bypass was recently constructed through the area to connect with K10 Highway to the north. The proposed recreational use would be compatible with the character of the area.

III. SUITABILITY OF SUBJECT PROPERTY FOR THE USES TO WHICH IT HAS BEEN RESTRICTED

Applicant's Response:

"The property is currently used for agricultural purpose which it is most suited. This is in part why it is perfect for this proposed use and development."

The subject property is zoned A (Agricultural) and V-C (Valley Channel) Districts. Section 12-306 of the County Zoning Regulations provides the following information on the A District:

"...the purpose of this district is to provide for a full range of agricultural activities, including processing and sale of agricultural products raised on the premises, and at the same time, to offer protection to agricultural land from the depreciating effect of objectionable, hazardous and unsightly uses."

The A District is associated with a majority of the unincorporated portion of Douglas County. Uses allowed in the A District include: farms, truck gardens, orchards, or nurseries for the growing or propagation of plants, trees and shrubs in addition other types of open land uses. It also includes residential detached dwellings, churches, hospitals and clinics for large and small animals, commercial dog kennels, and rural home occupations.

Section 12-314-1 notes the purpose of the V-C Channel District as:

"to prevent, in those areas subject to periodic or potential flooding, such development as would result in a hazard to health or safety, and to insure the general public will not be forced to expend exorbitant funds to remedy flood problems."

Uses allowed in the V-C District include: farms, truck gardens, orchard, nurseries, as well as grazing, hunting and fishing, recreational facilities (provided such structures conform to the requirements of Section 12-314-2 and 12-319), preserves, and accessory uses.

In addition, uses enumerated in Section 12-319 which are not listed as permitted uses in the A or V-C Districts, may be permitted when approved as Conditional Uses. The property has very little grade change and a portion is encumbered with floodplain. The property is well suited for agricultural uses permitted within the A and V-C Districts and is also well suited for the proposed *Athletic Field* use.

Staff Finding – The property is suitable for agricultural uses which are permitted within the A (Agricultural) and V-C (Valley Channel) Districts. The property is also suitable for the proposed *Athletic Fields* use, when approved as a Conditional Use.

IV. LENGTH OF TIME SUBJECT PROPERTY HAS REMAINED VACANT AS ZONED

Staff Finding – The property has been in agricultural production since the adoption of the 1966 Zoning Regulations.

V. EXTENT TO WHICH REMOVAL OF RESTRICTIONS WILL DETRIMENTALLY AFFECT NEARBY PROPERTY

Applicant's Response:

"There will be an increase in traffic at select times of the day within the area of E 1750 and N 1300 relative to the amount of current traffic at that intersection. Additionally, the field lights might also cause effect to nearby property."

Section 12-319-1.01 of the County Zoning Regulations recognize that *"certain uses may be desirable when located in the community, but that these uses may be incompatible with other uses permitted in a district...when found to be in the interest of the public health, safety, morals*

and general welfare of the community may be permitted, except as otherwise specified in any district from which they are prohibited.” The proposed use is included in the Conditional Uses enumerated in Section 12-319-4 of the Zoning Regulations for the Unincorporated Territory of Douglas County as *Public Utility*.

Impacts from this type of use are usually associated with traffic, crowd noise or activity, and lighting. The surrounding properties are in agricultural use and there are no residential uses in the nearby area so the activity/noise on the site should have no negative impacts.

The northwest field will be lighted with LED lights on 70 ft poles and additional fields may be lighted in the future. The lights will be directed away from the road; however, additional lighting information should be provided to insure glare to the roadway is prevented.

The applicant noted that there will be increased traffic in the area due to the facility and provided traffic information to the County Engineer. The County Engineer indicated that no improvements were needed to N 1300 or E 1750 Roads to accommodate the anticipated additional traffic. He noted that both roads were currently substandard due to the construction of the K10 bypass but that KDOT's contractor will restore both roads to their original condition with the completion of the bypass. A maximum of 88 trips are expected for the peak evening hour. The traffic information provided by the applicant indicates that approximately 15% of the traffic will come from the east/south via K10 or 1900 Road, 35% will come from the north via Noria Road, and 50% from the west along the SLT, Haskell Avenue and N 1300 Road. The various routes to the facility from different destination points will reduce the traffic impact on residences in the area. (Figures 2 and 3)

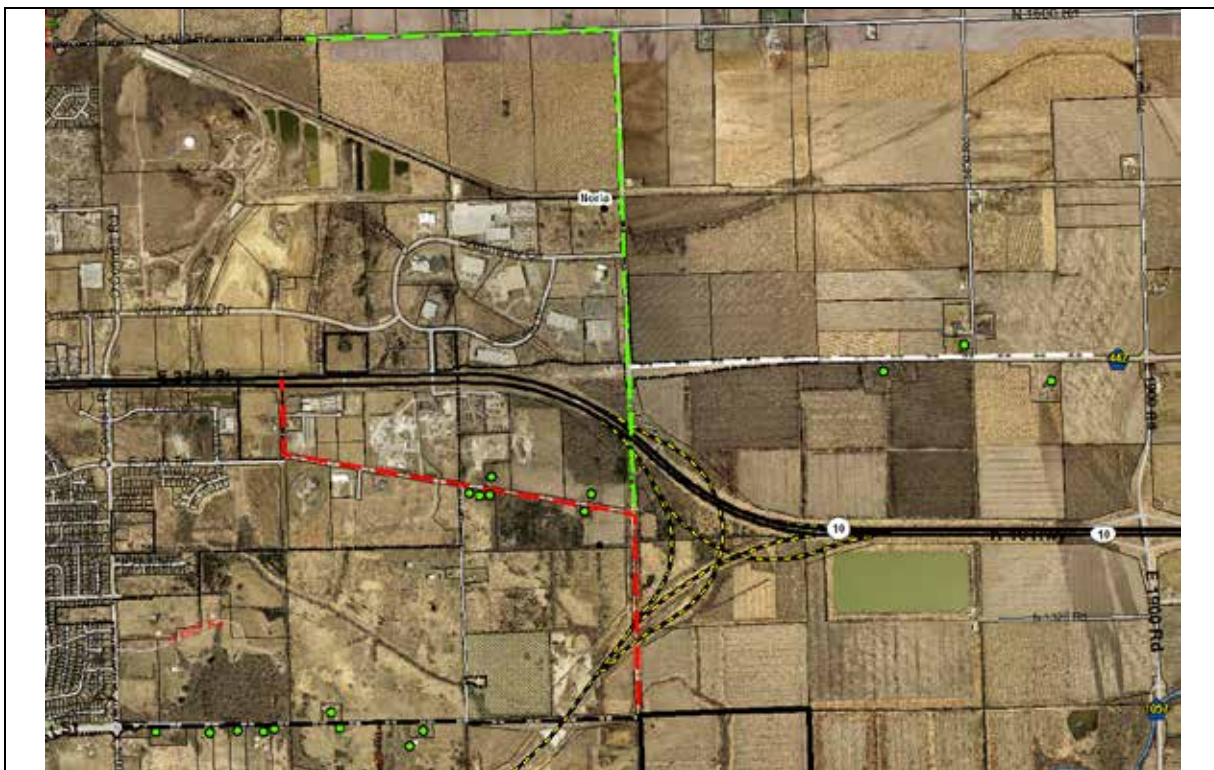


Figure 2. Potential routes to the site. Black dashed line at bottom, is extension of 31st Street/N 1300 Rd. Red dashed line in center is extension of E 25th Street to Noria Road. Green, is extension of 15th Street to Noria Rd, white is County Route 442/N 1400 Rd for traffic from the east.

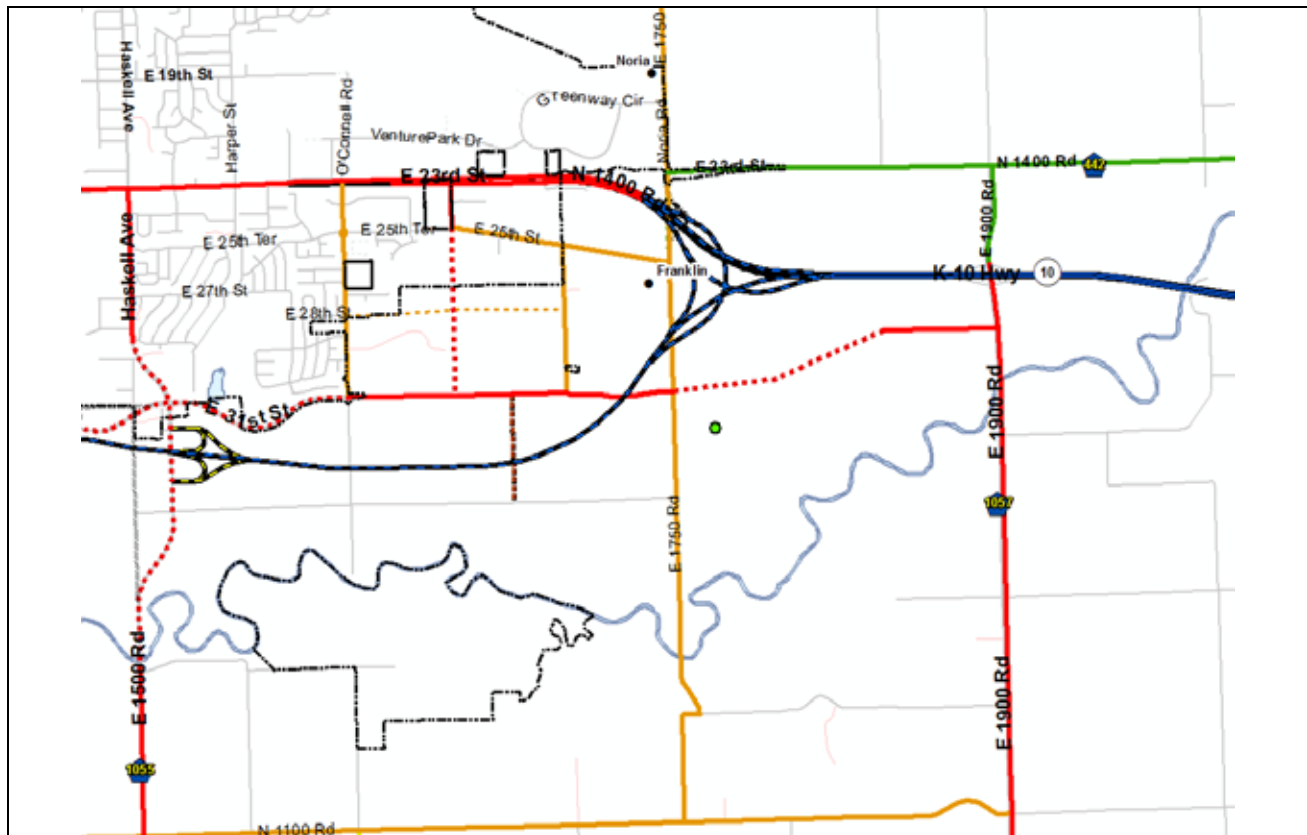


Figure 3. Potential routes current designation in the DG County Access Management Map: 31st Street/ N 1300 Road, Principal Arterial (chip and seal), Noria Road (E 1750 Road) Major Collector (asphalt), County Route442/N 1400 Road, Minor Arterial (asphalt)

Staff Finding – Due to the agricultural nature of the nearby properties, the activity on the site should have no negative impact. The County Engineer indicated that the expected traffic for the facility can be accommodated without any road improvements. Additional lighting information shall be provided before the item is considered by the County Commission to insure that the exterior lighting will be designed to prevent glare to the adjacent road or adjacent properties.

VI. RELATIVE GAIN TO THE PUBLIC HEALTH, SAFETY AND WELFARE BY THE DESTRUCTION OF THE VALUE OF THE PETITIONER'S PROPERTY AS COMPARED TO THE HARDSHIP IMPOSED UPON THE INDIVIDUAL LANDOWNERS

Applicant's Response:

"Should this property be denied this use it would cause a huge step back in the development of alternate facilities for this use in our community. The property has been long searched and vetted for this use and development. There is no relative gain to denying this application."

Approval of this request would accommodate the development of a rural soccer complex in close proximity to both Lawrence and Eudora. The applicant noted that there was a large demand for a soccer facility in the area. While this phase of the project is focusing on training activities, the facility may be expanded in the next phase to expand the training facility and perhaps include tournaments and matches. This expanded phase would be dependent on the transportation

network in the area to insure it is suited to the traffic demand. Increasing the outdoor recreation areas in Douglas County would directly benefit the public health by increasing opportunities for exercise and outdoor activity.

No benefit would be afforded to the public health, safety, or welfare by the denial of the request as no negative impacts are anticipated with the facility. Denial of the request would require the applicant to find another similar sized property in close proximity to the population areas and the major transportation network.

Staff Finding – In staff's opinion, there would be no gain to the public health, safety, and welfare by the denial of the request. Approval of the request would increase availability of sports/recreational facilities in Lawrence and Douglas County.

VII. CONFORMANCE WITH THE COMPREHENSIVE PLAN

Applicant's Response:

"We feel our project's location and vision complies 100% with the Horizon 2020 comprehensive Plan and have attached Chapter 9, which provides recommendations for park, open space, and recreation."

The Comprehensive Plan provides the following recommendations regarding recreation in Douglas County:

This Comprehensive Plan also recommends the continued improvement and development of active recreational facilities at school sites and other Douglas County and Township locations. (Page 9-6, Horizon 2020)

Facilitate the development of new park, recreation, and open space areas and facilities as necessary to stay ahead of anticipated growth and to meet community demand or as unique opportunities arise to do so. (Policy 3.1(b), Page 9-16 Horizon 2020)

Encourage open space uses in the community's privately or publicly owned floodplains and drainageways.

The CUP request is compliant with these recommendations in that it proposes the development of an active recreational facility to meet community demand. In addition the facility consists primarily of open space uses in the form of athletic fields and landscaping in an area that is encumbered with regulatory floodplain.

Staff Finding –The proposed recreation use is in compliance with recommendations in the Comprehensive plan regarding development of active recreational facilities to meet community demand as well as recommendations encouraging open space uses in the floodplains.

CUP PLAN REVIEW

The development area for the facility contains approximately 27 acres in area and includes the following:

- 5 soccer fields. (360 ft x 225 ft / 81,000 sq ft)
- 4 smaller training areas (94 ft x 50 ft / 4,700 sq ft)
- 1 smaller sand field for specialized training (180 ft x 120 ft / 21,600 sq ft)

- Two structures, both 60 ft x 100 ft (6,000 sq ft x 2 / 12,000 sq ft). One will be a storage building and the other a training/meeting building with plans for a future concession area. Restrooms will be installed when a public water supply is available.
- Gravel/recycled asphalt access drive and parking area
- The plan notes that 15 portapotties (chemical toilets) will be located on site and the Health Department has approved the use. These are shown located west of the large parking lot and between the 2 southeastern fields. The plan should be revised to show the location of the portapotties more clearly.
- An access drive will circle the facility and two access points will be provided on to E 1750 Road to allow ingress/egress without congestion. The plan notes that the access drive will be 25 ft wide. The plan should also note the typical width of the access drives and entry points into the parking areas as a minimum of 24 ft wide.

Height, Area, and Density Standards: The setbacks required in the A District are dependent upon the nature of the adjacent road as noted below:

- The setback for E 1750 Road, a Major Collector Road, is 100 ft (Section 12-318) and is measured 40 ft from the centerline of the road (Section 12-305). The required yard along E 1750 Road is 140 ft from centerline of the road. Based on the scale of the plan, the buildings exceed this setback requirement. The distance from the building to the west property line should be added to the plan to insure the building is properly located.
- The setback for N 1300 Road, a Principal Arterial, is 150 ft and is measured 60 ft from the centerline of the road. The required yard along N 1300 Road (extended) is 210 ft from the centerline of the future road. The distance from the building to the proposed center line of N 1300 Road, extended, should be added to the plan to insure the building is properly located.

Parking and Access: The Zoning Regulations do not specify a parking requirement for an *Athletic Field* use. Typically, the parking for assembly uses is based on the number of seats provided for the event and parking for recreation uses is based on the square footage of the recreation area. The *Athletic Field* use is different from both of these uses as no seating is proposed and the number of occupants is set per team size rather than area. No seating is being proposed with this use and few spectators are anticipated. The applicant provided the following information related to parking:

- Typical team size of 15 players and 2 coaches: 34 plus 4 referees – 38 people per field. 5 fields results in 190 people.

The 200 parking spaces provided would allow 40 parking spaces per field; however, it is not the intent to use all the fields simultaneously. The applicant indicated that some fields are used while others are rested in order to maintain a suitable grassy surface. In addition, it is expected that many participants will be dropped off and the cars won't remain on the site during training. A grassed overflow parking area with 74 additional spaces will be located to the east of the standard parking area to accommodate the possible utilization of all fields or additional spectators. In staff's opinion, the amount of parking provided is adequate for this phase of the project. The Zoning Regulations require 1 ADA accessible space for a parking lot with up to 25 spaces. The parking lot to the north of the storage building has 20 spaces, with 2 of them being ADA accessible. The Zoning Regulations require 6 ADA accessible spaces for a parking lot with between 151 and 200 spaces. The parking lot to the east of the concessions building has 200

spaces, with 4 ADA parking spaces. 2 additional ADA parking spaces should be added to this parking area.

Water/Sewage Management: Rural water is not currently available in this area. The applicant intends to use well water for service water (irrigation, cleaning, etc.) and will bring potable water to the site for athletes and visitors. The Health Department has approved the use of potable water brought to the site. and has approved the proposed location for the septic system. The system will be installed with the first phase of this project; however, restrooms will not be added until a public water supply is available. This should be noted on the plan and the location of the chemical toilets should be shown more clearly on the plans.

Screening:

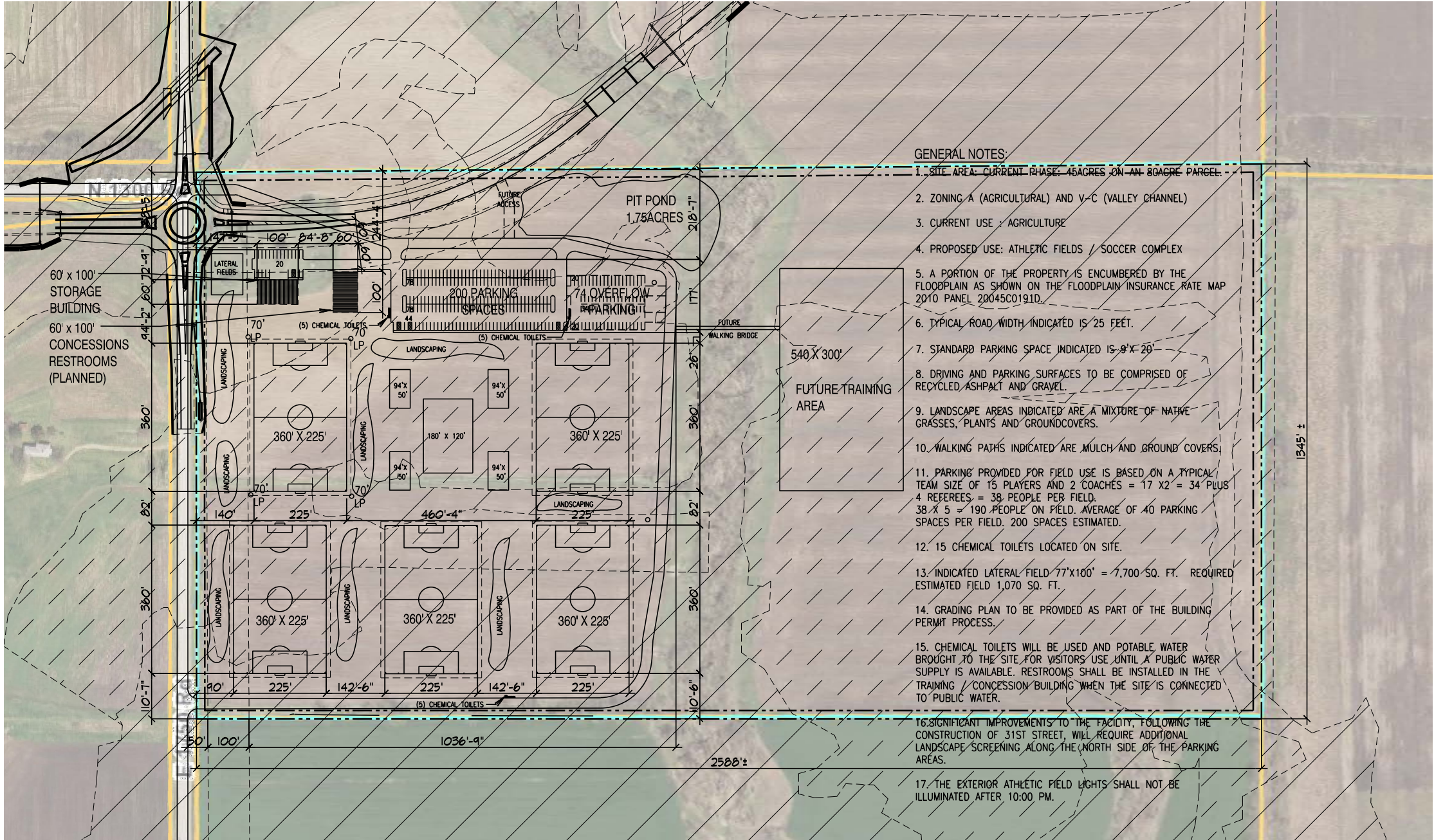
The plan shows the future extension of 31st Street (N 1300 Rd) so the use can be designed to accommodate the required future right-of-way. There is no road along the north property line at this time, so screening of the parking area from the north is not required at this time. Future improvements to the facility, following the construction of 31st Street, will require the addition of landscape screening along the north side of the parking areas. The small parking area to the north of the storage building is located approximately 100 ft from E 1750 Road. Screening of this parking area is not required due to the narrow width of the parking lot (2 single rows of parking) and the separation from the roadway.

Limits and Conditions:

The use should be administratively reviewed by the Zoning and Codes Office every 5 years to insure compliance with the standards of the Conditional Use Permit. Expiration dates are often applied to Conditional Uses so they may be re-evaluated to determine if they remain compatible with the development in the area. Given the nature of this use, staff does not recommend an expiration date.

Conclusion

The proposal complies with the County Zoning Regulations and the land use recommendation of *Horizon 2020*. The facility should be compatible with the surrounding land uses.



LEGAL DISCRIPTION:
15-13-20 N 1/2 NE 1/4 WW 35

C15.003.01

Jambars
Futbol Club
inc.

P.O. BOX 1030
Lawrence Ks, 66044

Calcio Village
N1300 Rd & E1750 Rd
Lawrence,
Kansas



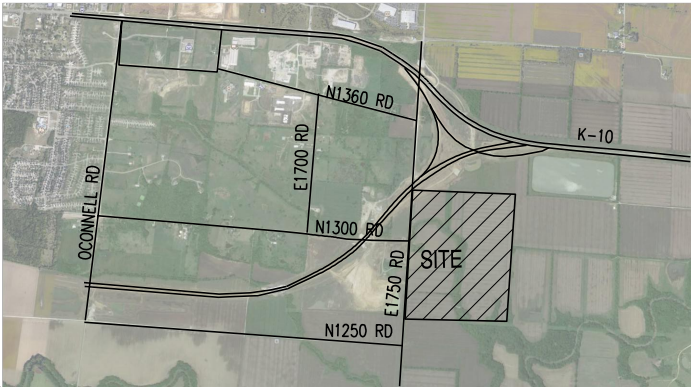
ADAMS
ARCHITECTS
700 Massachusetts
Suite 202
Lawrence KS, 66044

Rel. Date: 2-04-16

S100

SITEPLAN
CONDITIONAL USE
PERMIT

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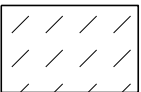


VICINITY MAP

SCALE: NTS

SITE PLAN

SCALE: 1" = 300'



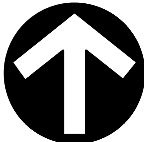
.2 PERCENT CHANCE ANNUAL FLOODING



ZONE A - 2 PERCENT CHANCE ANNUAL FLOODING



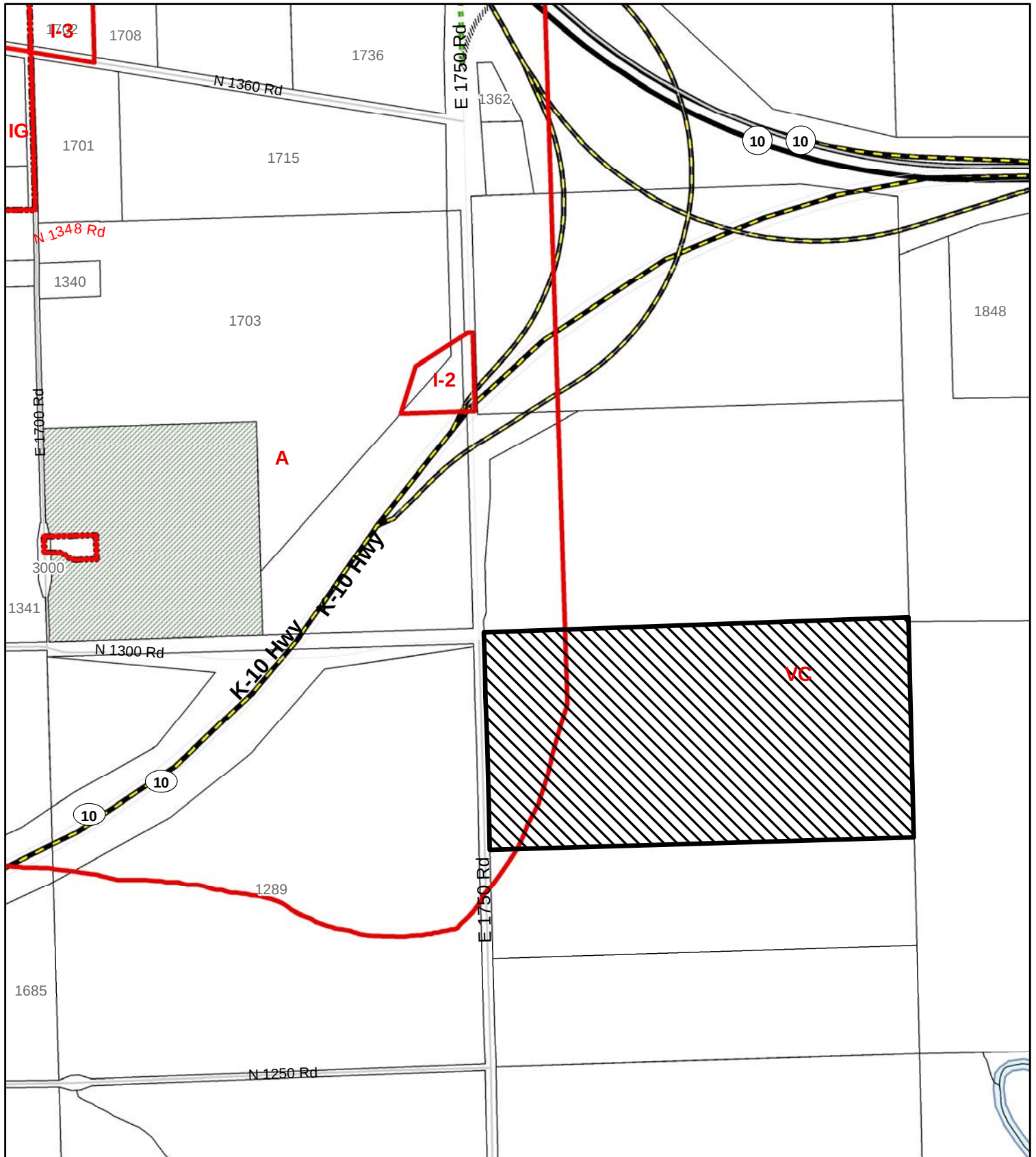
ZONE X - NOT IN FLOOD PLAIN



NORTH



NORTH



CUP-15-00613: Conditional Use Permit for Calcio Village Youth Soccer Park
 Located on the Southeast Corner of E 1750 Road and N 1300 Road (Extended to the East)

From: [karen heeb](#)
To: [Mary Miller](#); [Karen Heeb](#)
Subject: CUP-15-00613--Calico Village
Date: Wednesday, January 20, 2016 11:14:38 AM

TO : Planning Commission

FROM: Southsiders N 1300 Road Neighborhood Association

We have some concerns and questions regarding the CUP-15-00613--Calico Village:

When will the Athletic Field construction begin and be ready for use?

We are concerned about the additional traffic this would generate on N 1300 Road from O'Connell to E 1750 Road (Noria Road). It appears that this would be the most direct route from the west to the Athletic Field. With the South Lawrence Trafficway (SLT) construction still in progress, E1750 is not accessible from K10 for traffic from the east, either.

We have visited with Keith Browning about the very poor condition of N1300 Road between O'Connell and E 1750 Road. Our understanding is that this road will not be resurfaced until the SLT is open next summer. We think safety is a major factor which should be considered for this road as it currently exists. The speed limit is posted at 35 mph but is mostly ignored by non-residents of this area. Heavy SLT work vehicles still use the road, as well.

Water and sewage is another area of concern. All of our properties depend on well water. The water table is currently in pretty good shape and providing the water we need, but that is only after the great amount of rain we received earlier this year. Our well is 75 feet deep on the lowest portion of our property to provide the limited amount of water we can get. Adding another well or wells for this project would have a negative impact on all of our wells. At least one property depends on two cisterns and has to haul water because the well could no longer provide an adequate water supply. All of our properties have septic systems and once a week hired trash pickup.

How will all of this be handled by the Calico Village?

The idea of Calico Village is very positive and would be a nice addition to the

recreational facilities
available for the youth of our community. However, with the above mentioned
questions and concerns
which will affect all of us and our daily living, we will appreciate the opportunity to
discuss this with
the Planning Commission on Monday evening, January 25th, at 6:30 p.m.

Thank you for your attention and consideration to this matter.

Respectfully,

Karen Heeb, on behalf of:

Steve Eisele
Camilla Geiss
Larry Fish
Denise Fish
Steve Braden
Carolyn Braden
Phil Wentz
John Burggraf

Roger Kitsmiller
Ralph Kitsmiller
Scott Chamberlain
Diana McNish
Dennis McNish
Bill Vervynk
Bernice Vervynk
Vickie Burggraf

From: [John Thomas](#)
To: [Mary Miller](#)
Subject: Soccer Park
Date: Tuesday, January 19, 2016 9:37:02 AM
Attachments: [Buffer.pdf](#)

Mary,

Wak-n-Duk has been developed during the last 9 years into a thriving wildlife conservation area. In partnership with the NRCS team, this property now contains two, large wetland areas and approximately 35ac of native grassland. The wildlife is thriving, which is very exciting for us to see. It chosen to receive a Wildlife Habitat award in 2011 and a Buffer Strip award in 2014. We're proud of what's been accomplished to date and hope to protect this environmental resource for many years.

The purpose of this email is to express our concern about the proposed soccer complex on property adjacent to Wak-n-Duk. We aren't anti-development, it just seems like this group could choose a more suitable location further away from sensitive environmental areas. The combination of lighting, noise and vehicular traffic created by this project, will have an adverse impact on our property.

Possibly the harm could be mitigated by the addition of a noise barrier and an agreement to not develop the eastern half of the property. However it certainly seems appropriate to have this type of project located away from sensitive environmental areas like the Wakarusa river valley.

Attached please find a description of the buffer/filter strip program we have in place. If anyone from the planning commission would like to visit the property, it will be our honor to host them for a tour.

Respectfully,

John Thomas

--

John Thomas
Oread Medical Partners
913-647-6633
785-550-6253 (cell)

CRP Map

Date: 11/15/2006

Customer(s): WAK-N-DUK LLC

District: DOUGLAS COUNTY CONSERVATION DISTRICT

Field Office: LAWRENCE SERVICE CENTER

Agency: NRCS

Assisted By: Joseph Hoffman

Legal Description: 14-13-20 NW4



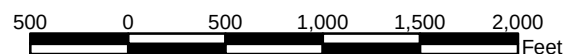
Legend

-  Buffer
-  Section Lines

Scale 1:12000



Image: drg_ks045.tif



Recess LDCMPC

Convene Joint Meeting with Eudora Planning Commission

ITEM NO. 1 CONDITIONAL USE PERMIT FOR CALCIO VILLAGE YOUTH SOCCER; E 1750 RD & N 1300 RD (MKM)

CUP-15-00613: Consider a Conditional Use Permit for Calcio Village, an *Athletic Field* complex for youth soccer on approximately 80 acres, located at the intersection of E 1750 Rd & N 1300 Rd. Submitted by Jambars Futbol Club Inc, on behalf of John Pendleton for Lorita H Pendleton, Trustee, property owner of record. (*Joint meeting with Eudora Planning Commission.*)

STAFF PRESENTATION

Ms. Mary Miller presented the item.

APPLICANT PRESENTATION

Mr. Joe Comparato, coach from Bishop Seabury and academy director of Jambars Futbol Club, said more soccer fields were needed in the community. He said the current facility was preoccupied by another organization. He said Calcio Village would be private and not create a major mecca of traffic or activity. He said the best case scenario would be to get fields planted in the fall which would require a year of work before being played on. He said they hoped to have a few fields of sod so that they could use them for training earlier than that. He said regarding lighting they were researching a new LED lighting system being used in Europe. He said it was eco-friendly and used a third of the power that a standard light would use. He said regarding irrigation they were planning on putting in a pit pond. He said the irrigation system was designed to be self-sufficient. He said it may be possible to put in a well for water use in the buildings but well water was not an option for irrigation due to the iron content.

PUBLIC HEARING

Ms. Karen Heeb, South Siders Neighborhood Association, expressed concern about the timing of the project and increased traffic. She said water/sewage use was a concern because she and her neighbors were dependent upon well water.

Mr. Andy Bentley, president of Lawrence adult soccer league, said they were out of soccer space due to capacity of members in the league and that they were having to turn new members away.

Ms. Andrea Anderson, parent of a youth soccer player in Lawrence, said she was excited for the opportunity for children to have more places to play.

Mr. Eric Nelson, Athletic Director at Bishop Seabury, said it was difficult to schedule games for field space at the Youth Sports Complex due to another club using it.

Mr. Phil Wente expressed concern about traffic, wildlife, and sanitation/well water.

Mr. Ivo Ivanov felt they should find a way to address any issues because this was an important project.

APPLICANT CLOSING COMMENTS

Mr. Comparato said they could not use well water to irrigate. He said there were a variety of access paths from E 1900 Rd to Noria.

COMMISSION DISCUSSION

Eudora Planning Commissioner Richard Campbell asked if the detention pond extended past the property line.

Mr. Comparato said once the surveying was done that would be rectified. He said once the land was surveyed they could figure out how things needed to land in the space. He said they still had work to do to finalize the drawings.

Eudora Planning Commissioner Kurt von Achen said Eudora Planning Commission did not have quorum this evening. He said they would participate with comments but would not take an official vote.

Commissioner Sands said a block away, E 1700 Rd/N 1300 Rd, shows a future City of Lawrence park. He asked if plans were in the future to develop it in a similar fashion.

Ms. Miller said she did not know what the City's plans were.

Mr. McCullough said there weren't specific plans and that a master plan would be worked on in the future.

Commissioner Denney asked if a permit was needed to drill a well.

Ms. Miller said that was correct.

Commissioner Denney asked when a permit was under consideration if the water level in the area would be taken into account.

Mr. McCullough said he was unsure of the review standards and that staff relied on the Health Department for those permits.

Commissioner von Achen asked staff to show the proposed area on the overhead. She inquired about eventual expansion to the east and if it would come back to Planning Commission.

Ms. Miller said it may be possible to extend east in the future. She said expanding it could be done with an administrative site plan but that a condition could be added for notification to the neighbors.

Commissioner von Achen inquired about the intensity of the use. She asked what seasons it would include. She wondered if they had assurance about the conservation area to the east remaining undeveloped as a buffer.

Ms. Miller said if developed on the east side a condition could be added for a buffer area.

Mr. Comparato said fall and spring season would be the majority of the training time. He said the facility would be closed during the winter months. He said the hours of operation for the academy would be 4:00pm-8:30pm. He said the adult league intended to use the fields on the weekends. He said the school anticipated 16-24 events per school year for home games.

Commissioner Kelly said the staff report stated a maximum of 88 trips for peak evening hours.

Ms. Miller said Bartlett & West prepared the traffic impact study. She said there were 300 trips per day expected and peak hours were the maximum expected during those peak hours. She said they expected 70% of the traffic to come off N 1300 Road, which would be about 60 trips per hour.

Mr. Darron Ammann, Bartlett & West, said the formula was comprised using the ITE manual.

Commissioner Kelly asked staff if the site grows how the County would determine when to make changes to the road.

Mr. McCullough said the traffic impact study indicates when geometric improvements are required. He said this will be capable of much higher traffic volumes once the SLT is complete and 31st Street extended out. He said turn lanes could be possible with a much more intense project.

Commissioner Kelly asked if there was a threshold that the County looked at for a different type of design.

Mr. McCullough said that was correct.

Commissioner Sands inquired about the lighting height.

Mr. Comparato said the lighting system would entail four poles, 70' high, on the four corners of the field.

Commissioner Sands wondered if the hours of use could be restricted.

ACTION TAKEN

Motioned by Commissioner Pennie von Achen, seconded by Commissioner Sands, to approve Conditional Use Permit, CUP-15-00613, for Calcio Village Youth Soccer, subject to the following conditions of approval, as revised by the Planning Commission (new wording in **bold** text), and forwarding to the Board of County Commission.

- a. The Conditional Use shall be administratively reviewed every 5 years.
- b. Provision of additional lighting information to insure the exterior lighting is designed to prevent off-site glare.
- c. **Before the item is considered by the County Commission, Planning staff will look into concerns raised by neighboring property owners regarding the potential impact of the proposed service well on the ground water level and the capacity of their wells.**
- d. **The Planning Office will provide mailed notice to all property owners within 1000 ft of the subject property when a site plan requiring County Commission approval is submitted.**
- e. Provision of a revised CUP plan with the following changes:
 - a. Label the distance from the buildings to the existing E 1750 Rd right-of-way and the future right-of-way for the extension of N 1300 Rd to insure required setbacks are provided.
 - b. Clearly show the location of the chemical toilets.
 - c. Add 2 additional ADA accessible spaces in the large parking area for a total of 6 spaces.
 - d. Add the following general notes to the plan:
 - i. *Chemical toilets will be used and potable water brought to the site for visitors use until a public water supply is available. Restrooms shall be installed in the training/concession building when the site is connected to public water.*
 - ii. *Significant improvements to the facility, following the construction of 31st Street, will require the addition of landscape screening along the north side of the parking areas.*
 - iii. ***A vegetated noise buffer will be installed on the east side of the property with the development of Phase 2.***

Commissioner Denney wondered if there was some way to tie the Conditional Use Permit to a determination of no impact on residents in the area as a condition of the CUP. He said it was one thing to have water for a public event but to have that interfere with individual homeowners, he felt there should be some sort of protection for them.

Commissioner Britton shared Commissioner Denney's concern but felt unqualified to say anything about it. He asked staff for suggestions on how to build in more protection.

Mr. McCullough said if the applicant applied for a permit and didn't get it they would have to make a provision for water. He said he was not sure how to weigh in on that since it was not Planning's area of expertise. He stated staff could do some research and provide that to County Commission.

Commissioner Denney said he wanted to be sure the issue was heard somewhere in the process. He said he was fine if it was heard during the permitting process.

Commissioner Britton said he would support the motion with the caveat that the well water issue be looked into. He felt it was important to build in safeguards for any expansion eastward.

Commissioner Kelly said that traffic and water would continually be a concern after the SLT was complete. He said he would support the motion because he felt there were steps in place to monitor growth.

Unanimously approved 9-0.

No vote from Eudora Planning Commission due to not having quorum.

Adjourn Joint Meeting
Reconvene LDCMPC

From: [Karen Heeb](#)
To: [AD - Crabtree, Robin](#)
Subject: Re: Planning Commission Meeting 1/25/16 - Subject: CUP -15-00613
Date: Friday, January 29, 2016 7:31:07 PM

Thank you so much for this information, Robin. I shall pass it on to the neighbors.

Karen Heeb

Sent from my iPhone

On Jan 29, 2016, at 2:51 PM, <rcrabtree@douglas-county.com> <rcrabtree@douglas-county.com> wrote:

Jim and Ms. Heeb;

The CUP-15-00613 is scheduled for our February 10, 6:00 p.m. agenda. I will include your letter as backup to our agenda packet.

Thanks,
Robin Crabtree
Administration
785-832-5268

From: County Commissioner - Flory, James
Sent: Friday, January 29, 2016 8:28 AM
To: Karen Heeb
Cc: AD - Crabtree, Robin; AD - Weinaug, Craig
Subject: Re: Planning Commission Meeting 1/25/16 - Subject: CUP -15-00613

Ms. Heeb:

There will be a public hearing before the Board of County Commissioners on CUP 15-00613, and at that meeting you and your neighbors will have an opportunity to voice all of your concerns and suggestions as to what action the Commission should take on issue. I do not know the date for the BOCC hearing, but it will be on our agenda which is posted on the Douglas County website or you can contact the planner who is assigned to this CUP to determine the hearing date. We consider ALL input on these issues including any written (letters, emails) material and oral testimony at the hearing. I will forward your emails to Robin Crabtree in the County Administrator's Office so they can be included in the packet for the meeting, and suggest you provide any additional material to Robin before the meeting date.

Jim Flory

Sent from my iPad

On Jan 29, 2016, at 7:55 AM, Karen Heeb <klheeb@yahoo.com> wrote:

More thoughts to share with you from
one of the neighbors.

Thank you,

Karen Heeb

Sent from my iPhone

Begin forwarded message:

From: Diana L Hird <ksgrulla@sbcglobal.net>
Date: January 29, 2016 at 6:01:14 AM CST
To: karen heeb <klheeb@yahoo.com>
Subject: Re: Planning Commission Meeting 1/25/16 -
Subject: CUP -15-00613
Reply-To: Diana L Hird <ksgrulla@sbcglobal.net>

Hello How about routing the traffic onto E1250 Rd? It is much flatter, wider, has fewer trees and no homes. It can be made wider to handle the increased traffic. It is a much safer road for the increased traffic. Thank you

On Thursday, January 28, 2016 11:36 AM, karen heeb <klheeb@yahoo.com> wrote:

TO: Douglas County Commissioners

From: "Southsiders N 1300 Road Neighborhood Association"

Our group, Southsiders N 1300 Road, left the Planning Commission Meeting, noted above, feeling that our concerns and questions were only partially answered. Therefore, I'm writing to you County Commissioners to specifically state what we felt were left questionable. After our presentation, we did not have the opportunity to ask questions or reply to some of the statements made by the Calcio representatives. We need information as to where we go from here. We are not against the proposed soccer complex, but quite concerned about the impact on our daily lives by the following:

(We felt there was too much "wiggle room" concerning two specific aspects.)

1) Possibility of their digging a well. They stated "probably not" but left that open-ended. Only if one lives or has lived in the country and their water supply for themselves, family, and livestock is completely dependent on the well, can they understand the gravity of the situation if the well runs dry. An additional well or wells reducing the water table level can create that. We have experienced, in times of less than average rainfall, that very thing. None of us use our well water for irrigation. Only one Planning Commissioner "got it" and questioned how the well situation could be handled. No one had an answer.

2) Opening/using the soccer fields. Calcio says they will plant grass in the fall with plans to open in fall of 2017. However, they MAY develop some turf fields to use this fall 2016. N 1300 Road is not to be resurfaced until the South Lawrence Trafficway is open for use. That date is indefinite at this time.

Safety is a big issue, as well as wear and tear on our vehicles and farm equipment that already use this road in its poor condition. Gravel has recently been put in the torn up areas but is only a temporary fix, at best. Additional traffic without road improvement is only going to increase all of these problems. If they start using some of the soccer fields this fall, we need to figure out a way to handle the extra traffic.. From the west, we will be the most direct route to Calcio. (We wonder if the Planning Commissioners have actually been out to see our road.)

The traffic engineering information given at the meeting indicated we could have as many as 60-88 cars per hour from approximately 4:00 to 9:00 on weekdays with more on tournament days, weekends, etc. as a result of Calcio's popularity.

I was on the Steering Committee for the extension of N 1300 Road from O'Connell to 1900 E. (In the future, this will be a great way to get to Calcio.) When this plan was approved, there was no money available for construction. What is the time-frame for that road to be started/completed?

3) The fact that a sound barrier wall, for the preservation acreage to the east of the soccer fields so the noise won't disturb the birds and their nesting, was approved with little discussion and seemed of more importance to the Planning Commissioners than any concerns for those of us on farms that live along N 1300 Road. (We also have deer that cross our road daily.)

No questions were asked of us for details on any of the aspects of our concerns.

I tried to send you an attachment with our original letter to the Planning Commission but was not able to do that, so I am going to try to send you a separate email. (I am a novice with all of these computer possibilities.)

We have always tried to work with a positive attitude and figure out ways that we can work together for everyone's benefit as our area has become more and more "invaded by progress." We would appreciate your help and suggestions in dealing with this most recent development.

Thank you for your attention to and consideration of these matters.

Respectfully,

Karen Heeb on behalf of:

Steve Eisele	
Roger Kitsmiller	
Camilla Geiss	Ralph
Kitsmiller	
Larry Fish	Scott
Chamberlain	
Denise Fish	Diana
McNish	
Steve Braden	
Dennis McNish	
Carolyn Braden	Bill

Vervynk
Phil Wente
Bernice Vervynk
John Burggraf
Vickie Burggraf

This_email_has_been_scanned_by_the_MessageLabs_Email_Security_System.

Phil Wente
1627 N 1300 Rd
Lawrence, KS

Concerns:

I have a few concerns that I would like to see addressed and resolved "before" such a project begins instead of doing the trial and error method.

One concern to me is the proximity to The Shelter. In the past, I've had some problems with some of their guest on 3 separate occasions at my property on 1300 Rd. Sheriff was called on 2 of them. I ran off the third as they were heading into my backyard (I assume they were looking for a way to break in). They continue to roam the neighborhood. While on a walk east on 1300 Rd I found a wooden cigar box with what I would call a significant amount of heroin, needles and spoons up by Karen Heeb's place in the ditch which was turned in to DG Cty Sheriff.

Let's not forget the parties that regularly occurred on 1250 Rd from Haskell students before the bypass construction began. We should check and see what DG Cty Sheriff can tell us about that. I'm pretty sure they didn't stop drinking because of access to 1250 Rd. during construction. We still have to clean our ditches along the road of trash tossed out the car/truck traffic on 1300 Rd.

I think with access to services such as porta potty restrooms and water, it will draw an undesirable crowd when not in use by the sporting events and late at night. What type of security will be in place after normal business hours? YSI sports fields which are managed by the city/county have had break in problems in the past. It's almost guaranteed to happen here.

Road conditions from O'Connell to 1700 Rd.: There is a stretch of road that runs from O'Connell Rd. east that is in dangerously poor condition (Down to one lane at times) due to heavy duty dump trucks, earth mover and tractor/trailer traffic. These roads will not be repaired until the bypass project has been completed as I understand it. Extra traffic is not what is needed at this time unless road safety concerns are addressed as well. We have about 20 deer living between O'Connell Ranch property and my property. They are crossing at the road all day and night. The people who live along 1300 Rd. know to watch out for deer but the 600 plus members of Calcio don't. Signage would be required.

Naturally water and our water table is a major concern since we rely on wells or haul water along 1300 Rd and have difficulty at times with the water table at certain times.

What are the county codes for sewage, greywater, and clean water at a public use facility? Before final approval I would hope that there be a legitimate water and sanitation system in place that does not encroach on our delicate water system.

As shown in diagrams at January's meeting, Graphics depicted futuristic features of 1300 Rd and Noria Rd., such as Round-a-bouts. Extended roads to 1900 Rd.,. What is the time frame for these projects? What is the future impact to 1300 Rd?











DOUGLAS COUNTY ADMINISTRATIVE SERVICES

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Lawrence, KS 66044-3064
(785) 832-5329 Fax (785) 832-5320
www.douglas-county.com

Sarah Plinsky
Assistant County Administrator

MEMO TO: Board of County Commissioners

FROM: Sarah Plinsky, Assistant County Administrator

SUBJECT: Personnel Policies Update

DATE: February 5, 2016

In September of 2011, the Board of County Commissioners updated the Personnel Policies related to changes associated with the implementation of the Financial and Human Resources Information System. Below, is an outline of the last set of changes recommended by the Steering Committee before "Go Live" of Phase II of the HR System planned for April 1st of 2016. The specific changes planned for this update are outlined below in general and specifically:

1. Update and specify the maximum vacation hour limits for part-time employees
2. Modify the Sick/Vacation Leave Donation Program
3. Make the holiday calendar permanent and the establish a Personal Leave program
4. Several changes related to Public Safety Shift Schedules around Holidays.
5. Create the longevity program

Vacation Leave

At the 09/23/15 meeting the BOCC approved a new vacation maximum limit for full time employees. At this time Administrative Services and Payroll wish to establish a tiered maximum vacation for part time benefitted employees, usage increments and clarification on the donation of vacation leave.

1. Part Time employees with an FTE value of 0.80-0.99 will have a maximum vacation accrual limit of two hundred fifty six (256.00) hours
2. Part Time employees with an FTE value of 0.50-0.79 will have a maximum vacation accrual limit of one hundred sixty hours (160.00) hours
3. Non Exempt staff shall use vacation leave increments of no less than one-quarter (.25) hour.
4. Exempt staff shall use vacation leave in increments no less than four (4.00) hours.
5. Limit for vacation received. An employee may not receive more than 400 hours of combined sick or vacation leave donations over a 2 year period. The limit will be adjusted pro-rata basis (based on the position's FTE) for employees with an FTE of less than 1.0.
6. Move the calendar for the Excess Vacation payment to the regular Payroll/Benefit Calendar year as set by Payroll each year

i) Please note this was discussed on 9/23/15 but not recorded in motion.

Sick Leave

At the 09/23/15 meeting the BOCC approved the donation of vacation time on an hour for hour basis. At this time Administrative Services and Payroll wish to reiterate inclusion of sick leave donations on the hour for hour basis, usage increments and clarification on the donation of vacation leave.

1. Calculation of donation. The donated hours shall be transferred to from the donor to the recipient on an hour for hour basis.
2. Non Exempt staff shall use vacation leave in increments of no less than one-quarter (.25) hour.
3. Exempt staff shall use vacation leave in increments of no less than four (4.00) hours.
4. Limit for sick leave received. An employee may not receive more than 400 hours of combined sick or vacation leave donations over a 2 year period. The limit will be adjusted pro-rata basis (based on the position's FTE) for employees with an FTE of less than 1.0.

Sick Leave Loans

The current County policy leaves a "loophole" where newly hired staff may receive vacation and sick leave donations immediately, while longer term staff is required to obtain a sick leave loan prior to receiving donations. The update of this policy eliminates this loophole and while it does leave potential exposure to the County in regards to unpaid loans, Administrative Services and Payroll staff believes the risk is minimal and the updated policy increases efficiency and consistency.

1. Recommendation to eliminate the requirement that employees have 2 years of employment prior to being able to obtain a sick leave loan.
2. Update the requirement that the employee must use all vacation, sick, personal and compensatory leave prior to a sick leave loan.
3. Limit for sick leave loan received. An employee may not receive more than 160 hours of sick leave loans in any 3 year period. The limit will be adjusted pro-rata basis (based on the position's FTE) for employees with an FTE of less than 1.0.

Establishment of a permanent holiday schedule.

HRPY feels that establishment of a permanent holiday schedule increases efficiency on several levels.

1. All full-time and regular part-time employees of the County shall be scheduled off or receive compensation for the following holidays:
 1. New Year's Day - January 1
 2. Martin Luther King's Birthday - 3rd Monday in January
 3. Memorial Day - Last Monday in May
 4. Independence Day - July 4
 5. Labor Day - 1st Monday in September
 6. Thanksgiving Day - 4th Thursday in November
 7. Day after Thanksgiving - 4th Friday
 8. Christmas Day - December 25
1. The Governing Body may designate other days as holidays.
2. Holidays that fall on a Saturday will be observed on the preceding Friday, and those which fall on a Sunday will be observed on the following Monday.
3. Should Christmas day fall on a Thursday, December 26 will also be a Holiday.
4. Should Christmas day fall on a Tuesday, December 24 will also be a Holiday.

Creation of Personal Leave Accounts, Holidays Worked and Not Worked.

As part of the changes requested for practices that work efficiently with the new system, HRPY recommends clarifications to holidays worked and that the days formerly listed on the Holiday Calendar as "Discretionary Days" be revamped as Personal Leave. For purposes of holidays and the personal leave balance a shift worker is defined as an employee who's position functions in a 24/7 operation. Examples of this are Deputy Sheriff's, Corrections Officers and 911 center employees.

Not working on a holiday

1. For non shift workers that are not scheduled to work on a designated holiday, the department head will shift the holiday to another day in the same work week. If the employee does not re-designate the holiday, they do not receive holiday pay.
2. Shift personnel whose regular non-work day falls on a holiday will have their accumulated personal leave balance increased by eight hours (8) for full time employees and on a pro-rata basis for part time with benefits employees

Working on a holiday

1. Shift workers
 - a. Change the policy regarding which day(s) are considered holidays on the employee's timesheet to the day on which the employee's shift begins. For example, an employee whose shift begins at 11:00 p.m. on the holiday will be paid holiday pay for that shift.
 - b. Revise the definition of holiday pay to be compensated two and a half (2.5) times their regular rate for all hours worked on a holiday.
 - c. Clarify that holiday hours are always paid hours, no hours will be added to an employee's compensatory leave account.

PERSONAL LEAVE.

1. Annual award of 8.00 hours full time employees and on a pro-rata basis for part time with benefits employees (based on the employee's FTE).
 - i) To be eligible for Personal Leave, an employee's status must be full time or part time with benefits, with an employment date on or before May 31 of that year.
 - ii) Employees hired after June 1 will be eligible for the Commission awarded Personal Leave the following year.
 - iii) Personal Leave will be used in increments of no less than one-quarter (.25) hour.
 - iv) Accumulated Personal Leave is not paid upon separation from employment.
 - v) Non Shift workers: must be utilized during the calendar year for which it was authorized and PRIOR to the first day of the last pay period in December for which a pay check is issued during the next calendar year.
 - vi) Shift Workers: will be permitted to carry a balance of Personal Leave from year to year.
 - (1) Hours will accumulate throughout the year with no cap.
 - (2) At the last pay period in December for which a pay check is issued during the current calendar year the Personal Leave balance will be reduced to 24.00 hours.
 - (3) There is no payment for hours lost in excess of 24.00

Creation of Longevity Program

As directed by the Governing Body, staff has created a program for Longevity pay.

- 1) Longevity awarded for all employees with an FTE 0.50 or higher
 - a) There shall be no proration in dollars received based on FTE value
- 2) Award amount to be set at \$75 per year after five years unless otherwise designated by County Commission
- 3) No cap on dollar amount received by EE
- 4) Employee will have 60 months of continuous service as of the end of the last full pay period in October each year.
 - a) In cases of employees that have left the County and returned, the most recent hire date will be utilized in the determination of eligibility and resulting payment.
- 5) Payment will be included the employee's first check in November each year. 11/10/2016 will be the first payment.
- 6) Payment does not include the "waiting period" of five years.

Recommended Motion: Update the Douglas County Personnel Policies to:

1. Move the calendar for the Excess Vacation payment to the regular Payroll/Benefit Calendar year as set by Payroll each year
2. Update and specify the maximum vacation hour limits for part-time employees
3. Modify the Sick/Vacation Leave Donation Program
4. Make the holiday calendar permanent and the establish a Personal Leave program
5. Several changes related to Public Safety Shift Schedules around Holidays.
6. Create the longevity program

As outlined by staff.

Excess Vacation Payout Three Year Analysis of Employee Counts and Departments

Year	Hours Paid	Dollars Paid	# of Employees Pd	# of Employees in Dept	% of Employees Rec Pymt	% Usage vs All County	% Total Employees	Department
2014	3.94	\$ 88.26	1	15	6.67%	1.54%	3.31%	Co Clerk
2014	1305.48	\$ 43,233.01	23	157	14.65%	35.38%	34.66%	Sheriff
2014	5.13	\$ 143.23	1	21	4.76%	1.54%	4.64%	Treas
2014	41	\$ 1,604.69	2	33	6.06%	3.08%	7.28%	Dist Atty
2014	144.63	\$ 2,703.50	3	26	11.54%	4.62%	5.74%	ECC
2014	88.66	\$ 5,696.48	2	7	28.57%	3.08%	1.55%	Admin
2014	219.38	\$ 7,910.14	4	11	36.36%	6.15%	2.43%	Info Tech
2014	40.28	\$ 1,202.76	1	6	16.67%	1.54%	1.32%	Admin Svcs
2014	191.5	\$ 6,629.04	3	15	20.00%	4.62%	3.31%	Appraiser
2014	886.63	\$ 24,986.37	18	55	32.73%	27.69%	12.14%	Public Works
2014	89	\$ 2,474.17	2	5	40.00%	3.08%	1.10%	Zoning
2014	102	\$ 2,116.56	2	13	15.38%	3.08%	2.87%	Maintenance
2014	141.3	\$ 3,812.66	3	34	8.82%	4.62%	7.51%	Youth Svcs
2014	3258.93	\$ 102,600.87	65	453	14.35%	100.00%	100.00%	Grand Total

2013	1010.59	\$ 31,769.38	19	145	13.10%	30.16%	33.41%	Sheriff
2013	72.5	\$ 1,719.31	2	34	5.88%	3.17%	7.83%	Dist Atty
2013	127	\$ 3,176.44	4	26	15.38%	6.35%	5.99%	ECC
2013	112.41	\$ 5,781.19	2	5	40.00%	3.17%	1.15%	Admin
2013	196.88	\$ 6,858.91	4	11	36.36%	6.35%	2.53%	Info Tech
2013	85	\$ 2,572.95	1	6	16.67%	1.59%	1.38%	Emerg Mgmt
2013	1059	\$ 26,970.66	20	54	37.04%	31.75%	12.44%	Public Works
2013	142.75	\$ 3,717.98	3	4	75.00%	4.76%	0.92%	Zoning
2013	145	\$ 4,429.18	3	12	25.00%	4.76%	2.76%	Maintenance
2013	191.65	\$ 6,710.31	5	33	15.15%	7.94%	7.60%	Youth Services
2013	3142.78	\$ 93,706.31	63	434	14.52%	100.00%	100.00%	Grand Total

2012	555.75	\$ 18,255.71	13	149	8.72%	22.41%	33.04%	Sheriff
2012	96	\$ 2,246.01	2	32	6.25%	3.45%	7.10%	Dist Atty
2012	135.75	\$ 3,315.78	4	27	14.81%	6.90%	5.99%	ECC
2012	79.3	\$ 4,862.16	2	5	40.00%	3.45%	1.11%	Admin
2012	184.64	\$ 6,399.01	4	11	36.36%	6.90%	2.44%	Info Tech
2012	24.44	\$ 766.93	2	6	33.33%	3.45%	1.33%	Admin Svcs
2012	175.5	\$ 5,176.76	4	14	28.57%	6.90%	3.10%	Appraiser
2012	1111.75	\$ 27,309.30	19	53	35.85%	32.76%	11.75%	Public Works
2012	139	\$ 3,551.14	2	4	50.00%	3.45%	0.89%	Zoning
2012	184.5	\$ 5,093.42	3	12	25.00%	5.17%	2.66%	Maintenance
2012	117.1	\$ 2,852.30	3	37	8.11%	5.17%	8.20%	Youth Services
2012	2803.73	\$ 79,828.52	58	451	12.86%	100.00%	100.00%	Grand Total