

NOTICE

This scan only represents the application as filed. The information contained herein meets the requirements of K.A.R. 5-3-1 or K.A.R. 5-5-1, and has been found acceptable for filing in the office of the Chief Engineer. The application should not be considered to be a complete application as per K.A.R. 5-3-1b or K.A.R. 5-5-2a.

THE STATE OF KANSAS



KANSAS DEPARTMENT OF AGRICULTURE
Jackie McClaskey, Secretary of Agriculture

DIVISION OF WATER RESOURCES
David W. Barfield, Chief Engineer

File Number 49733
This item to be completed by the Division of Water Resources.

APPLICATION FOR PERMIT TO APPROPRIATE WATER FOR BENEFICIAL USE

Filing Fee Must Accompany the Application
(Please refer to Fee Schedule attached to this application form.)

KDWPT Trost-Borchardt WRP

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To the Chief Engineer of the Division of Water Resources, Kansas Department of Agriculture,
1320 Research Park Drive, Manhattan, Kansas 66502:

1. Name of Applicant (Please Print): USDA-NRCS
Address: 760 S. BROADWAY BLVD.
City: SALINA State KS Zip Code 67401
Telephone Number: (785) 823-4537

2. The source of water is: [X] surface water in Tributary to Salt Creek (stream)
OR [] groundwater in Republican River (drainage basin)

Certain streams in Kansas have minimum target flows established by law or may be subject to administration when water is released from storage for use by water assurance district members. If your application is subject to these regulations on the date we receive your application, you will be sent the appropriate form to complete and return to the Division of Water Resources.

3. The maximum quantity of water desired is 162.1 (Dike 1) acre-feet OR gallons per calendar year, to be diverted at a maximum rate of N/A gallons per minute OR cubic feet per second.

Once your application has been assigned a priority, the requested maximum rate of diversion and maximum requested quantity of water under that priority number can NOT be increased. Please be certain your requested maximum rate of diversion and maximum quantity of water are appropriate and reasonable for your proposed project and are in agreement with the Division of Water Resources' requirements.

4. The water is intended to be appropriated for (Check use intended):
(a) [] Artificial Recharge (b) [] Irrigation (c) [X] Recreational (d) [] Water Power
(e) [] Industrial (f) [] Municipal (g) [] Stockwatering (h) [] Sediment Control
(i) [] Domestic (j) [] Dewatering (k) [] Hydraulic Dredging (l) [] Fire Protection
(m) [] Thermal Exchange (n) [] Contamination Remediation

YOU MUST COMPLETE AND ATTACH ADDITIONAL DIVISION OF WATER RESOURCES FORM(S) PROVIDING INFORMATION TO SUBSTANTIATE YOUR REQUEST FOR THE AMOUNT OF WATER FOR THE INTENDED USE REFERENCED ABOVE.

For Office Use Only:
F.O. 3 GMD Meets K.A.R. 5-3-1 (YES/NO) Use REC Source G.S County RP By KAB Date 12/1/16
Code REG Fee \$ 200 TR # Receipt Date 12/1/16 Check # credit

12/5/2016 UCM

5. The location of the proposed wells, pump sites or other works for diversion of water is:

Note: For the application to be accepted, the point of diversion location must be described to at least a 10 acre tract, unless you specifically request a 60 day period of time in which to locate the site within a specifically described, minimal legal quarter section of land.

- (A) One in the NW quarter of the NE quarter of the SW quarter of Section 29, more particularly described as being near a point 2475 feet North and 3730 feet West of the Southeast corner of said section, in Township 4 South, Range 2 East (West (circle one)), Republic County, Kansas.
- (B) One in the _____ quarter of the _____ quarter of the _____ quarter of Section _____, more particularly described as being near a point _____ feet North and _____ feet West of the Southeast corner of said section, in Township _____ South, Range _____ East/West (circle one), _____ County, Kansas.
- (C) One in the _____ quarter of the _____ quarter of the _____ quarter of Section _____, more particularly described as being near a point _____ feet North and _____ feet West of the Southeast corner of said section, in Township _____ South, Range _____ East/West (circle one), _____ County, Kansas.
- (D) One in the _____ quarter of the _____ quarter of the _____ quarter of Section _____, more particularly described as being near a point _____ feet North and _____ feet West of the Southeast corner of said section, in Township _____ South, Range _____ East/West (circle one), _____ County, Kansas.

If the source of supply is groundwater, a separate application shall be filed for each proposed well or battery of wells, except that a single application may include up to four wells within a circle with a quarter (1/4) mile radius in the same local source of supply which do not exceed a maximum diversion rate of 20 gallons per minute per well.

A battery of wells is defined as two or more wells connected to a common pump by a manifold; or not more than four wells in the same local source of supply within a 300 foot radius circle which are being operated by pumps not to exceed a total maximum diversion rate of 800 gallons per minute and which supply water to a common distribution system.

6. The owner of the point of diversion, if other than the applicant is (please print):

KDWPT 40 Robert Unruh
 (name, address and telephone number)
2446 250 Road Webber Kansas 66970
 (name, address and telephone number)

You must provide evidence of legal access to, or control of, the point of diversion from the landowner or the landowner's authorized representative. Provide a copy of a recorded deed, lease, easement or other document with this application. In lieu thereof, you may sign the following sworn statement:

I have legal access to, or control of, the point of diversion described in this application from the landowner or the landowner's authorized representative. I declare under penalty of perjury that the foregoing is true and correct.

Executed on 11/28, 2016 Asya Roencher Agent for USDA-NRCS
 Applicant's Signature

The applicant must provide the required information or signature irrespective of whether they are the landowner. Failure to complete this portion of the application will cause it to be unacceptable for filing and the application will be returned to the applicant.

7. The proposed project for diversion of water will consist of Structure for Water Level Control in Dike 1 (number of wells, pumps or dams, etc.)

and (was) (will be) completed (by) September 30, 2016 Feb 28, 2017 (Month/Day/Year - each was or will be completed)

8. The first actual application of water for the proposed beneficial use was or is estimated to be May 1, 2017 (Mo/Day/Year)

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- 9. Will pesticide, fertilizer, or other foreign substance be injected into the water pumped from the diversion works?
 Yes No If "yes", a check valve shall be required.

All chemigation safety requirements must be met including a chemigation permit and reporting requirements.

- 10. If you are planning to impound water, please contact the Division of Water Resources for assistance, prior to submitting the application. Please attach a reservoir area capacity table and inform us of the total acres of surface drainage area above the reservoir. **See Attached Table**

Have you also made an application for a permit for construction of this dam and reservoir with the Division of Water Resources? Yes No

- If yes, show the Water Structures permit number here _____
- If no, explain here why a Water Structures permit is not required _____

- 11. The application must be supplemented by a U.S.G.S. topographic map, aerial photograph or a detailed plat showing the following information. On the topographic map, aerial photograph, or plat, identify the center of the section, the section lines or the section corners and show the appropriate section, township and range numbers. Also, please show the following information:

- (a) The location of the proposed point(s) of diversion (wells, stream-bank installations, dams, or other diversion works) should be plotted as described in Paragraph No. 5 of the application, showing the North-South distance and the East-West distance from a section line or southeast corner of section.
- (b) If the application is for groundwater, please show the location of any existing water wells of any kind within 1/2 mile of the proposed well or wells. Identify each existing well as to its use and furnish the name and mailing address of the property owner or owners. If there are no wells within 1/2 mile, please advise us.
- (c) If the application is for surface water, the names and addresses of the landowner(s) 1/2 mile downstream and 1/2 mile upstream from your property lines must be shown.
- (d) The location of the proposed place of use should be shown by crosshatching on the topographic map, aerial photograph or plat.
- (e) Show the location of the pipelines, canals, reservoirs or other facilities for conveying water from the point of diversion to the place of use.

A 7.5 minute U.S.G.S. topographic map may be obtained by providing the section, township and range numbers to: Kansas Geological Survey, 1930 Constant, Campus West, University of Kansas, Lawrence, Kansas 66047. **See Attached Plan Sheet 2**

- 12. List any application, appropriation of water, water right, or vested right file number that covers the same diversion points or any of the same place of use described in this application. Also list any other recent modifications made to existing permits or water rights in conjunction with the filing of this application.

None.

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13. Furnish the following well information if the proposed appropriation is for the use of groundwater. If the well has not been completed, give information obtained from test holes, if available.

Information below is from: Test holes Well as completed Drillers log attached

Well location as shown in paragraph No.	(A)	(B)	(C)	(D)
Date Drilled	_____	_____	_____	_____
Total depth of well	_____	_____	_____	_____
Depth to water bearing formation	_____	_____	_____	_____
Depth to static water level	_____	_____	_____	_____
Depth to bottom of pump intake pipe	_____	_____	_____	_____

14. The relationship of the applicant to the proposed place where the water will be used is that of

Easement Holder

(owner, tenant, agent or otherwise)

15. The owner(s) of the property where the water is used, if other than the applicant, is (please print):

Kansas Department of Wildlife Parks and Tourism

(name, address and telephone number)

2446 250 Road, Webber, KS 66970

(name, address and telephone number)

16. The undersigned states that the information set forth above is true to the best of his/her knowledge and that this application is submitted in good faith.

Dated at Salina, Kansas, this 9 day of November, 2016.
(month) (year)

USDA-NRCS
Roger Masenthin
(Applicant Signature)

By Roger Masenthin
(Agent or Officer Signature)

Roger Masenthin, Water Resources Planning Specialist
(Agent or Officer - Please Print)

Assisted by PETER A. CLARK DESIGN ENGINEER Date: 01/27/16
(office/title)

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FEE SCHEDULE

1. The fee for an application for a permit to appropriate water for beneficial use, except for domestic use, shall be (see paragraph No. 2 below if requesting storage):

ACRE-FEET	FEE
0-100	\$200.00
101-320	\$300.00
More than 320	\$300.00 plus \$20.00 for each additional 100 acre-feet or any part thereof.

2. The fee for an application in which storage is requested, except for domestic use, shall be:

ACRE-FEET	FEE
0-250	\$200.00
More than 250	\$200.00 plus \$20.00 for each additional 250 acre-feet of storage or any part thereof.

Note: If an application requests both direct use *and* storage, the fee charged shall be as determined under No. 1 or No. 2 above, whichever is greater, but not both fees.

3. The fee for an application for a permit to appropriate water for water power or dewatering purposes shall be \$100.00 plus \$200.00 for each 100 cubic feet per second, or part thereof, of the diversion rate requested.

Note: The applicant shall notify the Chief Engineer and pay the statutorily required field inspection fee of \$400.00 when construction of the works for diversion has been completed, except that for applications filed on or after July 1, 2009, for works constructed for sediment control use and for evaporation from a groundwater pit for industrial use shall be accompanied by a field inspection fee of \$200.00.

MAKE CHECKS PAYABLE TO THE KANSAS DEPARTMENT OF AGRICULTURE

ATTENTION

A Water Conservation Plan may be required per K.S.A. 82a-733. A statement that your application for permit to appropriate water may be subject to the minimum desirable streamflow requirements per K.S.A. 82a-703a, b, and c may also be required from you. After the Division of Water Resources has had the opportunity to review your application, you will be notified whether or not you will need to submit a Water Conservation Plan. You also may be required to install a water flow meter or water stage measuring device on your diversion works prior to diverting water. There may be other special conditions or Groundwater Management District regulations that you will need to comply with if this application is approved.

CONVERSION FACTORS

1 acre-foot equals 325,851 gallons

1 million gallons equal 3.07 acre-feet

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**RECREATIONAL USE
SUPPLEMENTAL SHEET**

File No. 49733

Name of Applicant (Please Print): USDA-NRCS

1. Please indicate type of recreational use (boating, fishing, swimming, etc.): Wetland Restoration

2. Please summarize how the water will be used and justify the quantity of water requested: _____

Water will be used to enhance activities under the USDA-NRCS Wetlands Reserve Program.

The quantity of water requested is the volume of storage in the structure when full to maximum elevation (top of stoplogs in Structure 2) equaling 113.2 ac-ft with 72.93 surface acres.

Indirect use by evaporation = $72.93 \times 19 / 12 = 115.47$ ac-ft, combining for 228.7 ac-ft.

3. Please complete the following table showing estimated future water requirements:

ESTIMATED FUTURE WATER DIVERTED/STORED	
NEXT 5 YEARS	WATER TO BE DIVERTED (ACRE-FEET OR GALLONS)
Year 1	228.7 ac-ft
Year 2	228.7 ac-ft
Year 3	228.7 ac-ft
Year 4	228.7 ac-ft
Year 5	228.7 ac-ft

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Please attach any additional information, tables, or curves showing past, present and estimated future water requirements to substantiate the amount of water requested.

4. Please designate the legal description of the location where the water is to be used by providing the fractional part of the Section, Township and Range.

NW4 & SW4 Section 29, Township 4S, Range 2W

You may attach any additional information you believe will assist in informing the Division of the need for your request.

JANUARY 2016 REVISION

Lower surface areas obtained from Stage-Storage Module

KDWPT Trost-Borchardt WRP

Reservoir Capacity Table					
Dike 3 Basin - 32.8 ac Drainage Area					
Elev	Depth	Surface Area	Area	Cumulative Volume	
ft	ft	sf	ac	ac-ft	
1330.2	0.0	0	0.00	0.00	
1330.6	0.4	224	0.01	0.0	
1331.0	0.8	26682	0.61	0.1	
1331.4	1.2	36990	0.85	0.4	
1331.8	1.6	68526	1.57	0.9	
1332.2	2.0	144988	3.33	1.9	
1332.6	2.4	259223	5.95	3.7	
1333.0	2.8	393269	9.03	6.7	
1333.4	3.2	513502	11.79	10.9	Top of Stoplogs
1333.6	3.4	563041	12.93	13.4	Auxiliary Spillway
1335.0	4.8	1031913	23.69	39.0	Top of Dike

<15 ac-ft

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Reservoir Capacity Table					
Dike 2 Basin - 120.9 ac Drainage Area					
Elev	Depth	Surface Area	Area	Cumulative Volume	
ft	ft	sf	ac	ac-ft	
1329.4	0.0	1154	0.03	0.00	
1329.8	0.4	8050	0.18	0.0	
1330.2	0.8	17862	0.41	0.2	
1330.6	1.2	120169	2.76	0.8	
1331.0	1.6	164174	3.77	2.1	
1331.4	2.0	628873	14.44	5.7	
1331.8	2.4	1579288	36.26	15.9	
1332.2	2.8	2365969	54.32	34.0	
1332.6	3.2	2812204	64.56	57.8	
1333.0	3.6	3037803	69.74	84.6	
1333.4	4.0	3176852	72.93	113.2	Top of Stoplogs
1333.6	4.2	3271456	75.10	128.0	Auxiliary Spillway
1335.0	5.6	3586436	82.33	238.2	Top of Dike

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Reservoir Capacity Table					
Dike 1 Basin - 53.4 ac Drainage Area					
Elev	Depth	Surface Area	Area	Cumulative Volume	
ft	ft	sf	ac	ac-ft	
1329.4	0.0	1325	0.03	0.00	
1329.8	0.4	7045	0.16	0.0	
1330.2	0.8	18734	0.43	0.2	
1330.6	1.2	134875	3.10	0.9	
1331.0	1.6	371537	8.53	3.2	
1331.4	2.0	905959	20.80	9.1	
1331.8	2.4	1316671	30.23	19.3	
1332.2	2.8	1694419	38.90	33.1	
1332.6	3.2	1895404	43.51	49.6	
1333.0	3.6	2010555	46.16	67.5	
1333.4	4.0	2070332	47.53	86.2	Top of Stoplogs
1333.6	4.2	2088648	47.95	95.8	Auxiliary Spillway
1335.0	5.6	2213871	50.82	164.9	Top of Dike

NEW STREAM WORKSHEET

ES AJW

Date: 12/2/16

File No. 49,733

Basin Name: Republican Basin No. 27

Stream Name: East Salt Creek Trib 2A

Stream location (confluence with parent stream):

Section 29, Township 4 South, Range 2 (^WEast)

Map Color Coding:

Basin Stream – Blue

Named Main Stream off Basin Stream – Yellow

Named Stream off Main Stream – Green

Unnamed Trib (1, 2, 3, 4, etc.) – Pink

Unnamed Trib to Unnamed Trib (A, B, C, etc.) – Orange

Unnamed Trib to Unnamed Trib to Unnamed Trib (1, 2, 3, etc.) – Purple

Stream No. 3890 (computer assigned - entered by data entry staff)

Date Entered 12/5/2016 By LCM



November 29, 2016

Mr. David Barfield
Chief Engineer
Division of Water Resources
Kansas Department of Agriculture
109 Southwest 9th Street, 2nd Floor
Topeka, Kansas 66612-1283

Dear Sir:

This order is for an appropriations of water for beneficial use permit on the following Natural Resources Conservation Service (NRCS) Wetlands Reserve Program (WRP) easement:

KDWPT - Talmo Marsh (Trost) WRP 66-6215-08-00MDY Republic County

KDWPT - Talmo Marsh (Borchardt) WRP 66-6215-09-00NTF Republic County

An application for Permit to Appropriate Water for Beneficial Use is enclosed for each of the easements. Design plans, specifications, Warranty Easement Deeds, and current ownership correspondence are also enclosed for the project. Please ensure they are forwarded to the appropriate staff for review. If additional information pertaining to the recreational use supplement sheet and or the storage stage table is needed, please contact Peter A. Clark, Design Engineer, NRCS, Salina, Kansas, at 785-823-4532. Please direct other questions to Roger J. Masenthin, Water Resources Planning Specialist, at 785-823-4537.

Please note, enclosed is the completed credit card payment forms (for each easement) for your information. Thank you for processing the paperwork for this project. If you have any questions, please call me at 785-823-4537.

Sincerely,

ROGER J. MASENTHIN
Water Resources Planning Specialist

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Enclosure

WARRANTY EASEMENT DEED

WETLANDS RESERVE PROGRAM EASEMENT NO. 6662150800MDY

THIS WARRANTY EASEMENT DEED is made by and between Eldon R. Trost and Tana M. Trost of 1790 Highway K148, Belleville, Kansas 66935-8088 (hereafter referred to as the "Landowner"), Grantor(s), and the **UNITED STATES OF AMERICA**, by and through the Commodity Credit Corporation (CCC) (hereafter referred to as the "United States"), Grantee. The Landowner and the United States are jointly referred to as the "Parties". The acquiring agency of the United States is the Natural Resources Conservation Service (NRCS), United States Department of Agriculture.

Witnesseth:

Purposes and Intent. The purpose of this easement is to restore, protect, manage, maintain, and enhance the functional values of wetlands and other lands, and for the conservation of natural values including fish and wildlife and their habitat, water quality improvement, flood water retention, groundwater recharge, open space, aesthetic values, and environmental education. It is the intent of NRCS to give the Landowner the opportunity to participate in the restoration and management activities on the easement area. By signing this deed, the Landowner agrees to the restoration of the Easement Area and grants the right to carry out such restoration to the United States.

Authority. This easement deed acquisition is authorized by Title XII of the Food Security Act of 1985, as amended (16 U.S.C. §3837), for the Wetlands Reserve Program.

NOW THEREFORE, for and in consideration of the sum of One Hundred Ninety Thousand Nine Hundred Fifty-four Dollars (\$190,954.00), the Grantor(s), hereby grants and conveys with general warranty of title to the UNITED STATES OF AMERICA and its assigns, the Grantee, forever, all rights, title and interest in the lands comprising the easement area described in Part I and appurtenant rights of access to the easement area, but reserving to the Landowner only those rights, title, and interest expressly enumerated in Part II. It is the intention of the Landowner to convey and relinquish any and all other property rights not so reserved. This easement shall constitute a servitude upon the land so encumbered; shall run with the land for the duration of the easement; and shall bind the Landowner, (the Grantor(s)), their heirs, successors, assigns, lessees, and any other person claiming under them.

SUBJECT, however, to all valid rights of record, if any.

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PART I. Description of the Easement Area. The lands encumbered by this easement deed, referred to hereafter as the easement area, are described on EXHIBIT A which is appended to and made a part of this easement deed.

TOGETHER with a right of access for ingress and egress to the easement area across adjacent or other properties of the Landowner. Such a right-of-way for access purposes is described in EXHIBIT B which is appended to and made a part of this easement deed.

PART II. Reservations in the Landowner on the Easement Area. Subject to the rights, title, and interest conveyed by this easement deed to the United States, including the restoration, protection, management, maintenance, enhancement, and monitoring of the wetland and other natural values of the easement area, the Landowner reserves:

- A. Title. Record title, along with the Landowner's right to convey, transfer, and otherwise alienate title to these reserved rights.
- B. Quiet Enjoyment. The right of the Landowner to enjoy the rights reserved on the easement area without interference from others.
- C. Control of Access. The right to prevent trespass and control access by the general public subject to the operation of State and Federal law.
- D. Recreational Uses. The right to undeveloped recreational uses, including undeveloped hunting and fishing and leasing of such rights for economic gain, pursuant to applicable State and Federal regulations that may be in effect at the time. Undeveloped recreational uses must be consistent with the long-term protection and enhancement of the wetland and other natural values of the easement area. Undeveloped recreational use may include hunting equipment, such as, tree stands and hunting blinds that are rustic and customary for the locale as determined by NRCS.
- E. Subsurface Resources. The right to oil, gas, minerals, and geothermal resources underlying the easement area, provided that any drilling or mining activities are to be located outside the boundaries of the easement area, unless activities within the boundaries are specified in accordance with the terms and conditions of EXHIBIT C which is appended to and made a part of this easement deed, if applicable.
- F. Water uses and water rights. The right to water uses and water rights identified as reserved to the Landowner in EXHIBIT D which is appended to and made a part of this easement deed, if applicable.

PART III. Obligations of the Landowner. The Landowner shall comply with all terms and conditions of this easement, including the following:

A. Prohibitions. Without otherwise limiting the rights of the United States acquired hereunder, it is expressly understood that the rights to carry out the following activities and uses have been acquired by the United States and, unless authorized by the United States under Part IV, are prohibited on the easement area:

1. haying, mowing, or seed harvesting for any reason;
2. altering of grassland, woodland, wildlife habitat or other natural features by burning, digging, plowing, disking, cutting or otherwise destroying the vegetative cover;
3. dumping refuse, wastes, sewage, or other debris;
4. harvesting wood products;
5. draining, dredging, channeling, filling, leveling, pumping, diking, impounding, or related activities, as well as altering or tampering with water control structures or devices, except as specifically set forth in EXHIBIT D, if applicable;
6. diverting or causing or permitting the diversion of surface or underground water into, within, or out of the easement area by any means, except as specifically set forth in EXHIBIT D, if applicable;
7. building, placing, or allowing to be placed structures on, under, or over the easement area, except for structures for undeveloped recreational use;
8. planting or harvesting any crop;
9. grazing or allowing livestock on the easement area;
10. disturbing or interfering with the nesting or brood-rearing activities of wildlife including migratory birds;
11. use of the easement area for developed recreation. These uses include but are not limited to, camping facilities, recreational vehicle trails and tracks, sporting clay operations, skeet shooting operations, firearm range operations and the infrastructure to raise, stock, and release captive raised waterfowl, game birds and other wildlife for hunting or fishing;
12. any activities which adversely impact or degrade wildlife cover or other habitat benefits, water quality benefits, or other wetland functions and values of the easement area; and
13. any activities to be carried out on the Landowner's land that is immediately adjacent to, and functionally related to, the land that is subject to the easement if such activities will alter, degrade, or otherwise diminish the functional value of the eligible land.

B. Noxious Plants and Pests. The Landowner is responsible for noxious weed control and emergency control of pests as required by all Federal, State, and local laws. A plan to control noxious weeds and pests must be approved in writing by the NRCS prior to implementation by the Landowner.

C. Fences. Except for establishment cost incurred by the United States and replacement cost not due to the Landowner's negligence or malfeasance, all other costs involved in maintenance of fences and similar facilities to exclude livestock shall be the

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responsibility of the Landowner. The installation or use of fences which have the effect of preventing wildlife access and use of the easement area are prohibited on the easement or easement boundary.

- D. Use of water for easement purposes. The landowner shall use water for easement purposes as set forth in EXHIBIT D, which is appended to and made a part of this easement deed, if applicable.
- E. Protection of water uses and water rights. As set forth in EXHIBIT D, if applicable, the Landowner shall undertake actions necessary to protect any water rights and water uses for easement purposes.
- F. Taxes. The Landowner shall pay any and all real property and other taxes and assessments, if any, which may be levied against the land.
- G. Reporting. The Landowner shall report to the NRCS any conditions or events which may adversely affect the wetland, wildlife, and other natural values of the easement area.
- H. Survival. Irrelevant of any violations by the Landowner of the terms of this deed, this easement survives and runs with the land for its duration.

PART IV. Compatible Uses by the Landowner.

- A. General. The United States may authorize, in writing and subject to such terms and conditions the NRCS may prescribe at its sole discretion, the use of the easement area for compatible economic uses, including, but not limited to, managed timber harvest, periodic haying, or grazing.
- B. Limitations. Compatible use authorizations will only be made if, upon a determination by NRCS in the exercise of its sole discretion and rights, that the proposed use is consistent with the long-term protection and enhancement of the wetland and other natural values of the easement area. The NRCS shall prescribe the amount, method, timing, intensity, and duration of the compatible use.

PART V. Rights of the United States. The rights of the United States include:

- A. Management activities. The United States has the right to enter the easement area to undertake, on a cost-share basis with the Landowner or other entity as determined by the United States, any activities to restore, protect, manage, maintain, enhance, and monitor the wetland and other natural values of the easement area. The United States may apply to or impound additional waters, in accordance with State water law, on the easement area in order to maintain or improve wetland and other natural values.

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- B. Access. The United States has a right of reasonable ingress and egress to the easement area over the Landowner's property, whether or not the property is adjacent or appurtenant to the easement area, for the exercise of any of the rights of the United States under this easement deed. The authorized representatives of the United States may utilize vehicles and other reasonable modes of transportation for access purposes. To the extent practical, the United States shall utilize the access identified in EXHIBIT B.
- C. Easement Management. The Secretary of Agriculture, by and through the NRCS, may delegate all or part of the management, monitoring or enforcement responsibilities under this easement to any entity authorized by law that the NRCS determines to have the appropriate authority, expertise and resources necessary to carry out such delegated responsibilities. State or federal agencies may utilize their general statutory authorities in the administration of any delegated management, monitoring or enforcement responsibilities for this easement. The authority to modify or terminate this easement (16 U.S.C. §3837e(b)) is reserved to the Secretary of Agriculture in accordance with applicable law.
- D. Violations and Remedies - Enforcement. The Parties, Successors, and Assigns, agree that the rights, title, interests, and prohibitions created by this easement deed constitute things of value to the United States and this easement deed may be introduced as evidence of same in any enforcement proceeding, administrative, civil or criminal, as the stipulation of the Parties hereto. If there is any failure of the Landowner to comply with any of the provisions of this easement deed, the United States or other delegated authority shall have any legal or equitable remedy provided by law and the right:
1. To enter upon the easement area to perform necessary work for prevention of or remediation of damage to wetland or other natural values; and,
 2. To assess all expenses incurred by the United States (including any legal fees or attorney fees) against the Landowner, to be owed immediately to the United States.

PART VI. General Provisions.

- A. Successors in Interest. The rights granted to the United States shall accrue to any of its agents or assigns. All obligations of the Landowner under this easement deed shall also bind the Landowner's heirs, successors, agents, assigns, lessees, and any other person claiming under them. All the Landowners who are parties to this easement deed shall be jointly and severally liable for compliance with its terms.
- B. Rules of Construction and Special Provisions. All rights in the easement area not reserved by the Landowner shall be deemed acquired by the United States. Any ambiguities in this easement deed shall be construed in favor of the United States to effect the wetland and conservation purposes for which this easement deed is being

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acquired. The property rights of the United States acquired under this easement shall be unaffected by any subsequent amendments or repeal of the Wetlands Reserve Program. If the Landowner receives the consideration for this easement in installments, the Parties agree that the conveyance of this easement shall be totally effective upon the payment of the first installment.

- C. Environmental Warranty. "Environmental Law" or "Environmental Laws" means any and all Federal, State, local or municipal laws, orders, regulations, statutes, ordinances, codes, guidelines, policies, or requirements of any governmental authority regulating or imposing standards of liability or standards of conduct (including common law) concerning air, water, solid waste, hazardous materials or substance, worker and community right-to-know, hazard communication, noise, radioactive material, resource protection, subdivision, inland wetlands and watercourses, health protection and similar environmental health, safety, building and land use as may now or at any time hereafter be in effect.

"Hazardous Materials" means any petroleum, petroleum products, fuel oil, waste oils, explosives, reactive materials, ignitable materials, corrosive materials, hazardous chemicals, hazardous wastes, hazardous substances, extremely hazardous substances, toxic substances, toxic chemicals, radioactive materials, infectious materials, and any other element, compound, mixture, solution or substance which may pose a present or potential hazard to human health or the environment.

Landowner warrants that it is in compliance with, and shall remain in compliance with, all applicable Environmental Laws. Landowner warrants that there are no notices by any government authority of any violation or alleged violation of, non-compliance or alleged non-compliance with or any liability under any Environmental Law relating to the operations or conditions of the Property. Landowner further warrants that it has no actual knowledge of a release or threatened release of Hazardous Materials, as such substance and wastes are defined by applicable Federal and State law.

- D. General Indemnification. Landowner shall indemnify and hold harmless, its employees, agents, and assigns for any and all liabilities, claims, demands, losses, expenses, damages, fines, fees, penalties, suits, proceedings, actions, and cost of actions, sanctions asserted by or on behalf of any person or government authority, and other liabilities (whether legal or equitable in nature and including, without limitation, court costs, and reasonable attorneys' fees and attorneys' fees on appeal) to which the United States may be subject or incur relating to the easement area, which may arise from, but is not limited to, Landowner's negligent acts or omissions or Grantor's breach of any representation, warranty, covenant, agreements contained in this easement deed, or violations of any Federal, State, or local laws, including all Environmental Laws.

E. Maintenance Requirement. The Landowner agrees to the maintenance of the easement area and all required restoration practices and measures, developed by NRCS.

TO HAVE AND TO HOLD, this Warranty Easement Deed is granted to the United States of America and its assigns for the duration of the easement. The Landowner covenants that he, she, or they are vested with good title to the easement area and will warrant and defend the same on behalf of the United States against all claims and demands. The Landowner covenants to comply with the terms and conditions enumerated in this document for the use of the easement area and adjacent lands for access, and to refrain from any activity not specifically allowed or that is inconsistent with the purposes of this easement deed.

Dated this 24th day of August, 2009.

Landowner(s): X Eldon R. Trost by Tana M. Trost, Attorney-in-Fact
Eldon R. Trost by Tana M. Trost, Attorney-in-Fact

X Tana M. Trost
Tana M. Trost

ACKNOWLEDGMENT

STATE OF Kansas)
COUNTY OF Republic)

On this 24th day of August, 2009, before me, the undersigned, a Notary Public in and for said State personally appeared Tana M. Trost, known or proved to me to be the person(s) described in and who executed the foregoing instrument, and acknowledged that she executed the same as her free act and deed.

IN TESTIMONY WHEREOF, I have hereunto set my hand and official seal the day and year first above written.

Notary Public for the State of Kansas
Residing at Belleville, Mo
My Commission Expires 02-07-2011



X Ruth A. Rahe

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ACCEPTANCE BY GRANTEE:

I Eric B. Banks (name), State Conservationist (title), being the duly authorized representative of the United States Department of Agriculture, Natural Resources Conservation Service, do hereby accept this Conservation Easement Deed with respect to the rights and duties of the United States of America, Grantee.

Dated this 28th day of August, 2009.


Signature ERIC B. BANKS

State Conservationist
Title

This instrument was drafted by the Office of the General Counsel, U.S. Department of Agriculture, Washington, D.C. 20250-1400.

NONDISCRIMINATION STATEMENT

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its program and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (1202) 720-2600 (voice and TDD). To file a complaint of discrimination write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 705-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

PRIVACY ACT STATEMENT

The above statements are made in accordance with the Privacy Act of 1974 (U.S.C. 522a). Furnishing this information is voluntary; however, failure to furnish correct, complete information will result in the withholding or withdrawal of such technical or financial assistance. The information may be furnished to other USDA agencies, the Internal Revenue Service, the Department of Justice, or other State or Federal Law enforcement agencies, or in response to orders of a court, magistrate, or administrative tribunal.

MID AMERICA TITLE
COMPANY, INC.

Agreement #: 6662150800MDY
Name: ELDON R TROST

Acceptance of Conservation Easement

The Natural Resources Conservation Service hereby accepts the rights and duties of the United States as set forth in the Wetlands Reserve Program Warranty Easement Deed dated 8/28/2009 and filed on 9/11/2009 in Book 373, Page 81-89 (or as Instrument Number _____) in the office of the Republic County Recorder.

USDA, by and through the NRCS, acting for the Commodity Credit Corporation.

Eric B. Banks
ERIC B. BANKS
State Conservationist

State of Kansas)
County of Saline) ss

This instrument was acknowledged before me on February 22, 2012 by Eric B. Banks, as State Conservationist for the USDA Natural Resources Conservation Service, acting for the Commodity Credit Corporation.

[Signature]
Notary Public in and for said State

8-11-15



State of Kansas }
Republic County } ss.

This instrument was filed for record on the 12th day of March A.D. 2012 at 11:00 o'clock A M., and duly recorded in book 384 on page 344 Fee \$ 8.00
Marjaret Quint
Register of Deeds

By _____ Deputy
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**Exhibits A and B
Eldon R. Trost
Republic County
WRP Easement Description**

Commencing at the Southeast Corner of the Southwest Quarter of Section 29, Township 4 South, Range 2 West, Republic County, Kansas; thence with the East line of the Southwest Quarter of said section North 00 degrees 38 minutes 27 seconds West, 25.00 feet to the Point of Beginning; thence departing from said line South 89 degrees 27 minutes 28 seconds West, 1324.90 feet to the West line of the East Half of the Southwest Quarter; thence along said line North 00 degrees 34 minutes 44 seconds West, 2618.44 feet to the South line of the South Half of the Northwest Quarter; thence along said line South 89 degrees 26 minutes 22 seconds West, 1297.06 feet; thence departing from said line North 00 degrees 27 minutes 43 seconds West, 1325.64 feet to the North line of the South Half of the Northwest Quarter; thence along said line North 89 degrees 28 minutes 31 seconds East, 2614.98 feet to the Northeast Corner of the South Half of the Northwest Quarter; thence along the East line of the South Half of the Northwest Quarter of said section South 00 degrees 38 minutes 27 seconds East, 1324.00 feet to the Southeast Corner of the South Half of the Northwest Quarter; thence along the East line of the Southwest Quarter of said section South 00 degrees 38 minutes 27 seconds East, 2618.86 feet to the Point of Beginning.

The above described tract of land contains 159.16 acres, more or less, and is subject to all recorded and unrecorded easements, restrictions and right-of-ways.

Centerline 15 Foot Access Easement

Commencing at the West Quarter Corner of Section 29, Township 4 South, Range 2 West, Republic County, Kansas; thence with the West line of the Northwest Quarter of said section North 00 degrees 27 minutes 43 seconds West, 1225.65 feet to the Point of Beginning for said easement; thence continuing North 00 degrees 27 minutes 43 seconds West, 100.00 feet to the Northwest corner of the South Half of the Northwest Quarter; thence along the North line of the South Half of the Northwest Quarter, North 89 degrees 28 minutes 31 seconds East, 25.00 feet; thence departing from said line South 00 degrees 27 minutes 43 seconds East, 100.00 feet; thence South 89 degrees 28 minutes 31 seconds West, 25.00 feet to the Point of Beginning.

I FURTHER CERTIFY that the above survey was made by me or under my direct personal supervision and is based on field work completed December 11, 2008, and that I am a duly Registered Land Surveyor under the laws of the State of Kansas.

State of Kansas }
Republic County } ss.

Richard L. Mattson, P.L.S.
Kansas P.L.S. No. 1447

This instrument was filed for record on the
11th day of September A.D. 2009 at 10:10
o'clock A.M., and duly recorded in book 373
on page 81-89 Fee \$ 40.00
By Ruth Rahn
Register of Deeds
By Margaret Stuart Deputy



State of Kansas
 Republic County } ss.
 This instrument was filed for record on the
 11th day of September, A.D. 2009
 at 10:10 o'clock A.M., and duly
 recorded in book 373
 on page 27 Fee \$ 8.00
 By Ethel Kane Register of Deeds
 By Maureen Junt Deputy

AFFIDAVIT OF NON-PRODUCTION

STATE OF KANSAS)
)SS:
 COUNTY OF REPUBLIC)

Eldon R. and Tana M. Trost (affiant[s]), being first duly sworn upon
 his/their oath, state:



That the affiant[s] is/are the owner[s] of the following described real estate
 situated in Republic County, State of Kansas, to-wit:

**The South Half (S 1/2) of the Northwest Quarter (NW 1/4) and the East Half (E1/2) of the
 Southwest Quarter (SW 1/4) LESS ROW of Section Twenty-nine (29), Township Four (4)
 South, Range Two (2) West of the 6th P.M.**

Affiant[s] further state that he/they has/have owned the above-described
 property since April, 1989, and that to the best of his/their
 knowledge, no oil, gas, or any other mineral has previously or is now being produced from the property
 described herein, and, furthermore, to the best of his/their knowledge, the oil and gas lease dated
 November 17, 1989, has not now or ever been renewed.

Further affiant[s] sayeth not.

Eldon R. Trost by
 Eldon R. Trost Tana M. Trost, D.P.V.

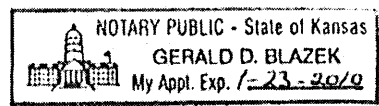
ACKNOWLEDGEMENT

STATE OF KANSAS)
)SS:
 COUNTY OF Republic)

BE IT REMEMBERED, that on this 10th day of July, 2008,
 before me, the undersigned, a Notary Public in and for the County and State aforesaid,
 came Tana M. Trost, who is/are personally known to me to be the same
 persons(s) who executed the within instrument of writing, and such person(s) duly
 acknowledged the execution of the same.

IN WITNESS WHEREOF, I have hereunto set my hand and Notarial Seal on the
 day and year last above written.

My Commission Expires:



Gerald D. Blazek
 Notary Public

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WARRANTY EASEMENT DEED IN PERPETUITY

WETLANDS RESERVE PROGRAM
EASEMENT NO. 6662150900NTF

THIS WARRANTY EASEMENT DEED is made by and between William A. Borchardt and Rosemary S. Borchardt, husband and wife of 2580 Nathaniel Court, Anchorage, Alaska 99517 and Richard B. Campbell and Debra B. Campbell, husband and wife of 8301 East 21st Street North, Suite 400, Wichita, Kansas 67206-2935 (hereafter referred to as the "Landowner"), Grantor(s), and the **UNITED STATES OF AMERICA**, by and through the Commodity Credit Corporation (CCC) (hereafter referred to as the "United States"), Grantee. The Landowner and the United States are jointly referred to as the "Parties". The acquiring agency of the United States is the Natural Resources Conservation Service (NRCS), United States Department of Agriculture.

Witnesseth:

Purposes and Intent. The purpose of this easement is to restore, protect, manage, maintain, and enhance the functional values of wetlands and other lands, and for the conservation of natural values including fish and wildlife and their habitat, water quality improvement, flood water retention, groundwater recharge, open space, aesthetic values, and environmental education. It is the intent of NRCS to give the Landowner the opportunity to participate in the restoration and management activities on the easement area. By signing this deed, the Landowner agrees to the restoration of the Easement Area and grants the right to carry out such restoration to the United States.

Authority. This easement deed acquisition is authorized by Title XII of the Food Security Act of 1985, as amended (16 U.S.C. §3837), for the Wetlands Reserve Program.

NOW THEREFORE, for and in consideration of the sum of Eight Hundred Thirty Thousand, Nineteen Dollars (\$830,019.00), the Grantor(s), hereby grants and conveys with general warranty of title to the UNITED STATES OF AMERICA and its assigns, (the Grantee), in perpetuity, all rights, title and interest in the lands comprising the easement area described in Part I and appurtenant rights of access to the easement area, but reserving to the Landowner only those rights, title, and interest expressly enumerated in Part II. It is the intention of the Landowner to convey and relinquish any and all other property rights not so reserved. This easement shall constitute a servitude upon the land so encumbered; shall run with the land for the duration of the easement; and shall bind the Landowner, (the Grantor(s)), their heirs, successors, assigns, lessees, and any other person claiming under them.

SUBJECT, however, to all valid rights of record, if any.

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State of Kansas }
Republic County } ss.

This instrument was filed for record on the 20th day of September A.D. 2010 at 3:00

o'clock P. M., and duly recorded in book 377
on page 199-211 Fee \$ 56.00

Mary Jane Dent
Register of Deeds

By _____ Deputy

PART I. Description of the Easement Area. The lands encumbered by this easement deed, referred to hereafter as the easement area, are described on EXHIBIT A which is appended to and made a part of this easement deed.

TOGETHER with a right of access for ingress and egress to the easement area across adjacent or other properties of the Landowner. Such a right-of-way for access purposes is described in EXHIBIT B which is appended to and made a part of this easement deed.

PART II. Reservations in the Landowner on the Easement Area. Subject to the rights, title, and interest conveyed by this easement deed to the United States, including the restoration, protection, management, maintenance, enhancement, and monitoring of the wetland and other natural values of the easement area, the Landowner reserves:

- A. Title. Record title, along with the Landowner's right to convey, transfer, and otherwise alienate title to these reserved rights.
- B. Quiet Enjoyment. The right of the Landowner to enjoy the rights reserved on the easement area without interference from others.
- C. Control of Access. The right to prevent trespass and control access by the general public subject to the operation of State and Federal law.
- D. Recreational Uses. The right to undeveloped recreational uses, including undeveloped hunting and fishing and leasing of such rights for economic gain, pursuant to applicable State and Federal regulations that may be in effect at the time. Undeveloped recreational uses must be consistent with the long-term protection and enhancement of the wetland and other natural values of the easement area. Undeveloped recreational use may include hunting equipment, such as, tree stands and hunting blinds that are rustic and customary for the locale as determined by NRCS.
- E. Subsurface Resources. The right to oil, gas, minerals, and geothermal resources underlying the easement area, provided that any drilling or mining activities are to be located outside the boundaries of the easement area, unless activities within the boundaries are specified in accordance with the terms and conditions of EXHIBIT C which is appended to and made a part of this easement deed, if applicable.
- F. Water uses and water rights. The right to water uses and water rights identified as reserved to the Landowner in EXHIBIT D which is appended to and made a part of this easement deed, if applicable.

PART III. Obligations of the Landowner. The Landowner shall comply with all terms and conditions of this easement, including the following:

- A. Prohibitions. Without otherwise limiting the rights of the United States acquired hereunder, it is expressly understood that the rights to carry out the following

activities and uses have been acquired by the United States and, unless authorized by the United States under Part IV, are prohibited on the easement area:

1. haying, mowing, or seed harvesting for any reason;
2. altering of grassland, woodland, wildlife habitat or other natural features by burning, digging, plowing, disking, cutting or otherwise destroying the vegetative cover;
3. dumping refuse, wastes, sewage, or other debris;
4. harvesting wood products;
5. draining, dredging, channeling, filling, leveling, pumping, diking, impounding, or related activities, as well as altering or tampering with water control structures or devices, except as specifically set forth in EXHIBIT D, if applicable;
6. diverting or causing or permitting the diversion of surface or underground water into, within, or out of the easement area by any means, except as specifically set forth in EXHIBIT D, if applicable;
7. building, placing, or allowing to be placed structures on, under, or over the easement area, except for structures for undeveloped recreational use;
8. planting or harvesting any crop;
9. grazing or allowing livestock on the easement area;
10. disturbing or interfering with the nesting or brood-rearing activities of wildlife including migratory birds;
11. use of the easement area for developed recreation. These uses include but are not limited to, camping facilities, recreational vehicle trails and tracks, sporting clay operations, skeet shooting operations, firearm range operations and the infrastructure to raise, stock, and release captive raised waterfowl, game birds and other wildlife for hunting or fishing;
12. any activities which adversely impact or degrade wildlife cover or other habitat benefits, water quality benefits, or other wetland functions and values of the easement area; and
13. any activities to be carried out on the Landowner's land that is immediately adjacent to, and functionally related to, the land that is subject to the easement if such activities will alter, degrade, or otherwise diminish the functional value of the eligible land.

B. Noxious Plants and Pests. The Landowner is responsible for noxious weed control and emergency control of pests as required by all Federal, State, and local laws. A plan to control noxious weeds and pests must be approved in writing by the NRCS prior to implementation by the Landowner.

C. Fences. Except for establishment cost incurred by the United States and replacement cost not due to the Landowner's negligence or malfeasance, all other costs involved in maintenance of fences and similar facilities to exclude livestock shall be the responsibility of the Landowner. The installation or use of fences which have the effect of preventing wildlife access and use of the easement area are prohibited on the easement or easement boundary.

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- D. Use of water for easement purposes. The landowner shall use water for easement purposes as set forth in EXHIBIT D, which is appended to and made a part of this easement deed, if applicable.
- E. Protection of water uses and water rights. As set forth in EXHIBIT D, if applicable, the Landowner shall undertake actions necessary to protect any water rights and water uses for easement purposes.
- F. Taxes. The Landowner shall pay any and all real property and other taxes and assessments, if any, which may be levied against the land.
- G. Reporting. The Landowner shall report to the NRCS any conditions or events which may adversely affect the wetland, wildlife, and other natural values of the easement area.
- H. Survival. Irrelevant of any violations by the Landowner of the terms of this deed, this easement survives and runs with the land for its duration.

PART IV. Compatible Uses by the Landowner.

- A. General. The United States may authorize, in writing and subject to such terms and conditions the NRCS may prescribe at its sole discretion, the use of the easement area for compatible economic uses, including, but not limited to, managed timber harvest, periodic haying, or grazing.
- B. Limitations. Compatible use authorizations will only be made if, upon a determination by NRCS in the exercise of its sole discretion and rights, that the proposed use is consistent with the long-term protection and enhancement of the wetland and other natural values of the easement area. The NRCS shall prescribe the amount, method, timing, intensity, and duration of the compatible use.

PART V. Rights of the United States. The rights of the United States include:

- A. Management activities. The United States has the right to enter the easement area to undertake, on a cost-share basis with the Landowner or other entity as determined by the United States, any activities to restore, protect, manage, maintain, enhance, and monitor the wetland and other natural values of the easement area. The United States may apply to or impound additional waters, in accordance with State water law, on the easement area in order to maintain or improve wetland and other natural values.
- B. Access. The United States has a right of reasonable ingress and egress to the easement area over the Landowner's property, whether or not the property is adjacent or appurtenant to the easement area, for the exercise of any of the rights of the United States under this easement deed. The authorized representatives of the United States may utilize vehicles and other reasonable modes of transportation for access purposes. To the extent practical, the United States shall utilize the access identified in EXHIBIT B.

- C. Easement Management. The Secretary of Agriculture, by and through the NRCS, may delegate all or part of the management, monitoring or enforcement responsibilities under this easement to any entity authorized by law that the NRCS determines to have the appropriate authority, expertise and resources necessary to carry out such delegated responsibilities. State or federal agencies may utilize their general statutory authorities in the administration of any delegated management, monitoring or enforcement responsibilities for this easement. The authority to modify or terminate this easement (16 U.S.C. §3837e(b)) is reserved to the Secretary of Agriculture in accordance with applicable law.
- D. Violations and Remedies - Enforcement. The Parties, Successors, and Assigns, agree that the rights, title, interests, and prohibitions created by this easement deed constitute things of value to the United States and this easement deed may be introduced as evidence of same in any enforcement proceeding, administrative, civil or criminal, as the stipulation of the Parties hereto. If there is any failure of the Landowner to comply with any of the provisions of this easement deed, the United States or other delegated authority shall have any legal or equitable remedy provided by law and the right:
1. To enter upon the easement area to perform necessary work for prevention of or remediation of damage to wetland or other natural values; and,
 2. To assess all expenses incurred by the United States (including any legal fees or attorney fees) against the Landowner, to be owed immediately to the United States.

PART VI. General Provisions.

- A. Successors in Interest. The rights granted to the United States shall accrue to any of its agents or assigns. All obligations of the Landowner under this easement deed shall also bind the Landowner's heirs, successors, agents, assigns, lessees, and any other person claiming under them. All the Landowners who are parties to this easement deed shall be jointly and severally liable for compliance with its terms.
- B. Rules of Construction and Special Provisions. All rights in the easement area not reserved by the Landowner shall be deemed acquired by the United States. Any ambiguities in this easement deed shall be construed in favor of the United States to effect the wetland and conservation purposes for which this easement deed is being acquired. The property rights of the United States acquired under this easement shall be unaffected by any subsequent amendments or repeal of the Wetlands Reserve Program. If the Landowner receives the consideration for this easement in installments, the Parties agree that the conveyance of this easement shall be totally effective upon the payment of the first installment.
- C. Environmental Warranty. "Environmental Law" or "Environmental Laws" means any and all Federal, State, local or municipal laws, orders, regulations, statutes,

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ordinances, codes, guidelines, policies, or requirements of any governmental authority regulating or imposing standards of liability or standards or conduct (including common law) concerning air, water, solid waste, hazardous materials or substance, worker and community right-to-know, hazard communication, noise, radioactive material, resource protection, subdivision, inland wetlands and watercourses, health protection and similar environmental health, safety, building and land use as may now or at any time hereafter be in effect.

"Hazardous Materials" means any petroleum, petroleum products, fuel oil, waste oils, explosives, reactive materials, ignitable materials, corrosive materials, hazardous chemicals, hazardous wastes, hazardous substances, extremely hazardous substances, toxic substances, toxic chemicals, radioactive materials, infectious materials, and any other element, compound, mixture, solution or substance which may pose a present or potential hazard to human health or the environment.

Landowner warrants that it is in compliance with, and shall remain in compliance with, all applicable Environmental Laws. Landowner warrants that there are no notices by any government authority of any violation or alleged violation of, non-compliance or alleged non-compliance with or any liability under any Environmental Law relating to the operations or conditions of the Property. Landowner further warrants that it has no actual knowledge of a release or threatened release of Hazardous Materials, as such substance and wastes are defined by applicable Federal and State law.

- D. General Indemnification. Landowner shall indemnify and hold harmless the United States, its employees, agents, and assigns for any and all liabilities, claims, demands, losses, expenses, damages, fines, fees, penalties, suits, proceedings, actions, and cost of actions, sanctions asserted by or on behalf of any person or government authority, and other liabilities (whether legal or equitable in nature and including, without limitation, court costs, and reasonable attorneys' fees and attorneys' fees on appeal) to which the United States may be subject or incur relating to the easement area, which may arise from, but is not limited to, Landowner's negligent acts or omissions or Grantor's breach of any representation, warranty, covenant, agreements contained in this easement deed, or violations of any Federal, State, or local laws, including all Environmental Laws.

TO HAVE AND TO HOLD, this Warranty Easement Deed is granted to the United States of America and its assigns forever. The Landowner covenants that he, she, or they are vested with good title to the easement area and will warrant and defend the same on behalf of the United States against all claims and demands. The Landowner covenants to comply with the terms and conditions enumerated in this document for the use of the easement area and adjacent lands for access, and to refrain from any activity not specifically allowed or that is inconsistent with the purposes of this easement deed.

Dated this 31st day of August, 2010

Landowner(s): X William A. Borchart
William A. Borchart
X Rosemary S. Borchart
Rosemary S. Borchart

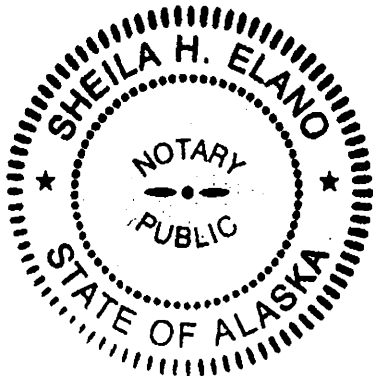
ACKNOWLEDGMENT

STATE OF ALASKA

COUNTY OF 3rd Judiciary

On this 31st day of August, 2010, before me, the undersigned, a Notary Public in and for said State personally appeared William Arthur Borchart, known or proved to me to be the person(s) described in and who executed the foregoing instrument, and acknowledged that he (he/she/they) executed the same as his (his/her/their) free act and deed.

IN TESTIMONY WHEREOF, I have hereunto set my hand and official seal the day and year first above written.



Notary Public for the State of Alaska
Residing at Anchorage, Alaska
My Commission Expires 03.04.2014

X Phil D. Slu

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All-purpose Acknowledgment

STATE OF ALASKA, COUNTY OF 3rd Judicial

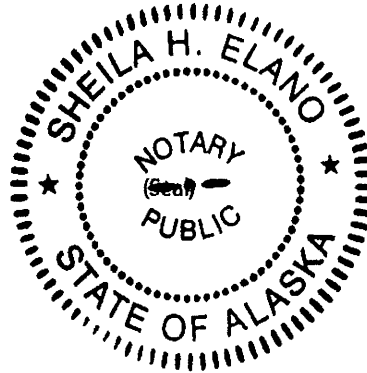
On August 31st, 2010 before me, the undersigned, a Notary Public
in and for said State, personally appeared

Rosemary S. Borhardt

personally known to me -OR- proved to me on the basis of satisfactory evidence/ to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature [Handwritten Signature]
Name (type or printed) Sheila Elano
My commission expires: 03.04.2014



TO HAVE AND TO HOLD, this Warranty Easement Deed is granted to the United States of America and its assigns forever. The Landowner covenants that he, she, or they are vested with good title to the easement area and will warrant and defend the same on behalf of the United States against all claims and demands. The Landowner covenants to comply with the terms and conditions enumerated in this document for the use of the easement area and adjacent lands for access, and to refrain from any activity not specifically allowed or that is inconsistent with the purposes of this easement deed.

Dated this 27th day of August, 2010

Landowner(s): [Signature]
Richard B. Campbell
[Signature]
Debra V. Campbell

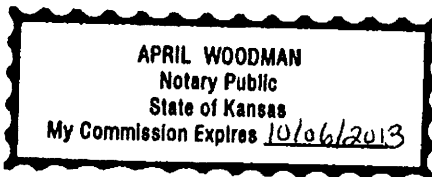
ACKNOWLEDGMENT

STATE OF Kansas

COUNTY OF Sedgwick

On this 27 day of August, 2010, before me, the undersigned, a Notary Public in and for said State personally appeared Richard B. Campbell & Debra V. Campbell, known or proved to me to be the person(s) described in and who executed the foregoing instrument, and acknowledged that they (he/she/they) executed the same as their (his/her/their) free act and deed.

IN TESTIMONY WHEREOF, I have hereunto set my hand and official seal the day and year first above written.



Notary Public for the State of Kansas
Residing at Wichita, KS
My Commission Expires 10/06/2013
X April M Woodman

WATER RESOURCES
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DEC 01 2016

Borchardt, William A.

Agreement Number: 66621509000NTF

ACCEPTANCE BY GRANTEE:

I, Jeffrey L Gross, Assistant State Conservationist, being the duly authorized representative of the United States Department of Agriculture, Natural Resources Conservation Service, do hereby accept this Conservation Easement deed with respect to the rights and duties of the United States of America, Grantee.

Dated this 15th day of September 2010



Jeffrey L. Gross
Assistant State Conservationist
Title

This instrument was drafted by the Office of the General Counsel, U.S. Department of Agriculture, Washington, D.C. 20250-1400

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its program and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (1202) 720-2600 (voice and TDD). To file a complaint of discrimination write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 705-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

PRIVACY ACT STATEMENT

The above statements are made in accordance with the Privacy Act of 1974 (U.S.C. 522a). Furnishing this information is voluntary; however, failure to furnish correct, complete information will result in the withholding or withdrawal of such technical or financial assistance. The information may be furnished to other USDA agencies, the Internal Revenue Service, the Department of Justice, or other State or Federal Law enforcement agencies, or in response to orders of a court, magistrate, or administrative tribunal.

MID AMERICA TITLE
COMPANY, INC.

Agreement #: 6662150900NTE
Name: WILLIAM BORCHARDT

Acceptance of Conservation Easement

The Natural Resources Conservation Service hereby accepts the rights and duties of the United States as set forth in the Wetlands Reserve Program Warranty Easement Deed dated 9/1/2010 and filed on 9/20/2010 in Book 377, Page 199-211 (or as Instrument Number _____) in the office of the Republic County Recorder.

USDA, by and through the NRCS, acting for the Commodity Credit Corporation.

Eric B. Banks
ERIC B. BANKS
State Conservationist

State of Kansas }
County of Saline } ss

This instrument was acknowledged before me on February 27, 2012 by Eric B. Banks, as State Conservationist for the USDA Natural Resources Conservation Service, acting for the Commodity Credit Corporation.

[Signature]
Notary Public in and for said State

HOLLY HERRICK, Notary Public
JANUARY 1, 2011
By Exp. Date 0-11-15



State of Kansas }
Republic County } ss.
This instrument was filed for record on the 12th day of March A.D. 2012 at 11:00 o'clock A.M., and duly recorded in book 384 on page 343 Fee \$ 8.00
Margaret Dunt
Register of Deeds
By _____ Deputy

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EXHIBITS A and B

EASEMENT DESCRIPTION:

Beginning at the section corner common to Sections 20 and 21, 28 and 29, Township 4 South, Range 2 West, Republic County, Kansas; thence with the West line of Section 21, North 00 degrees 12 minutes 30 seconds West, 2637.14 feet to the Northwest corner of the Southwest Quarter of Section 21; thence along the North line of the Southwest Quarter of said Section 21, North 89 degrees 19 minutes 08 seconds East, 2607.83 feet; thence departing from said line South 00 degrees 36 minutes 35 seconds East, 1903.01 feet; thence North 83 degrees 51 minutes 47 seconds West, 448.36 feet; thence South 04 degrees 17 minutes 14 seconds West, 2120.05 feet; thence South 89 degrees 10 minutes 58 seconds West, 247.11 feet; thence South 89 degrees 01 minutes 08 seconds West, 247.19 feet; thence South 88 degrees 58 minutes 53 seconds West, 247.12 feet; thence South 88 degrees 37 minutes 00 seconds West, 247.20 feet; thence South 88 degrees 57 minutes 00 seconds West, 247.17 feet; thence South 03 degrees 00 minutes 01 seconds West, 1349.05 feet; thence South 88 degrees 57 minutes 27 seconds West, 923.18 feet; thence South 00 degrees 48 minutes 05 seconds West, 1407.73 feet; thence North 88 degrees 20 minutes 24 seconds East, 293.79 feet; thence South 01 degrees 07 minutes 16 seconds East, 294.34 feet; thence South 00 degrees 49 minutes 17 seconds East, 294.47 feet; thence South 00 degrees 31 minutes 29 seconds East, 294.12 feet; thence South 00 degrees 00 minutes 08 seconds West, 294.42 feet; thence South 89 degrees 27 minutes 28 seconds West, 2648.33 feet to the West line of the East Half of Section 29; thence along said line North 00 degrees 38 minutes 27 seconds West, 3942.85 feet to the Southeast Corner of the North Half of the Northwest Quarter of Section 29; thence along the South line of the North Half of the Northwest Quarter of Section 29, South 89 degrees 28 minutes 32 seconds West, 2614.99 feet; thence departing from said line North 00 degrees 27 minutes 43 seconds West, 1325.65 feet; thence North 00 degrees 34 minutes 30 seconds West, 1326.19 feet to the North line of the South Half of the Southwest Quarter of Section 20; thence along said line North 89 degrees 35 minutes 41 seconds East, 2618.97 feet to the Northeast Corner of the South Half of the Southwest Quarter of Section 20; thence along the East line of the Southwest Quarter of said Section 20, South 00 degrees 13 minutes 25 seconds East, 1322.39 feet to the North Quarter Corner of Section 29; thence along the North line of the Northeast Quarter of said Section 29 North 89 degrees 30 minutes 41 seconds East, 2635.85 feet to the Point of Beginning.

The above described tract of land contains 704.64 acres, more or less, and is subject to all recorded and unrecorded easements, restrictions and right-of-ways.

CENTERLINE 20-FOOT ACCESS EASEMENT NO. 1:

Commencing at the Northwest Corner of Section 29, Township 4 South, Range 2 West, Republic County, Kansas; thence with the West line of said section, South 00 degrees 27 minutes 43 seconds East, 201.99 feet to the Point of Beginning for said centerline easement; thence departing from said line and along the centerline of said 20-foot access easement, North 79 degrees 29 minutes 29 seconds East, 25.39 feet to the point of terminus for said easement.

CENTERLINE 20-FOOT ACCESS EASEMENT NO. 2:

Commencing at the Southeast Corner of Section 29, Township 4 South, Range 2 West, Republic County, Kansas; thence with the South line of the Southeast Quarter of said section, South 89 degrees 27 minutes 28 seconds West, 435.50 feet to the Point of Beginning for said centerline 20-foot access easement; thence departing from said line and along the centerline of the 20-foot access easement, North 02 degrees 00 minutes 22 seconds East, 25.03 feet to the point of terminus.

ACCESS EASEMENT NO. 3:

Beginning at the Northeast Corner of the Southwest Quarter of Section 21, Township 4 South, Range 2 West, Republic County, Kansas; thence with the East line of the Southwest Quarter, South 00 degrees 21 minutes 26 seconds East, 1906.38 feet; thence departing from said line North 83 degrees 51 minutes 47 seconds West, 28.15 feet; thence North 00 degrees 36 minutes 35 seconds West, 1903.01 feet to the North line of the Southwest Quarter of said Section 21; thence along said line North 89 degrees 19 minutes 08 seconds East, 36.36 feet to the Point of Beginning.

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EXHIBITS C and D

Exhibit C regarding subsurface resources is not applicable with this Warranty Easement Deed.

Exhibit D regarding water uses and water rights is not applicable with this Warranty Easement Deed.



Natural Resources Conservation Service
760 South Broadway
Salina, Kansas 67401-4604

Phone: 785-823-4500
FAX: 785-823-4540
www.ks.nrcs.usda.gov

June 14, 2012

CERTIFIED – RETURN RECEIPT REQUESTED

Department of Wildlife and Parks
State of Kansas
c/o Robert L. Unruh
2446 250 Road
Webber, Kansas 66970

Dear Mr. Unruh:

Subject: Transfer of Land and Compatible Uses of the Wetlands Reserve Program (WRP)
Easement Land – WRP Agreement No. 66-6215-08-00MDY

Enclosed is a copy of Transfer Agreements signed by a Natural Resources Conservation Service (NRCS) official in acknowledgment of land ownership change. Also enclosed is a copy of the Warranty Easement Deed.

This letter is to point out, as the new landowner of the WRP easement listed above, your need to request and receive written authorization for any compatible use activities that you may wish to conduct on your WRP easement areas. A compatible use authorization is required for you to engage in any activity not reserved to the landowner under the WRP Warranty Easement Deed. Part II of the Warranty Easement Deed reserves to you the following rights on the easement area: title to the land, quiet enjoyment, control of public access, undeveloped recreational uses, and some subsurface resources.

If you wish to conduct any other activity on the WRP easement areas, you may at any time request authorization from NRCS. The WRP Warranty Easement Deed, Part III, A, lists activities and uses that have been acquired by the United States and are prohibited for the landowner on the easement area unless authorized as an allowable compatible use as stated in Part IV, B, of the deed.

The NRCS will evaluate whether the requested activity is consistent with the restoration objectives of the easement. The NRCS will only authorize activities that further the long-term protection and enhancement of the wetland functions and other natural values of the WRP easement area. We will notify you in writing whether such use is approved and any terms or conditions of the approval.

While you can realize economic returns from an activity on the WRP easement area that is approved by NRCS, you will not be assured of any specific level or frequency of

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An Equal Opportunity Provider and Employer

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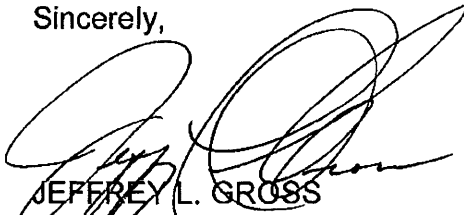
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such use. Since resource conditions change over time, NRCS cannot determine that any use is permanently compatible with the easement. Additionally, NRCS reserves the right to modify or cancel a compatible use authorization at any time if the NRCS determines that such activities do not further the protection and enhancement objectives of the easement.

If you are unsure whether you need a compatible use authorization, or if the land you recently purchased already has an approved compatible use authorization, contact Terry K. Alstatt, Supervisory District Conservationist, at 785-527-5573. We look forward to working with you on the future restoration success of your WRP easement areas.

Sincerely,



JEFFREY L. GROSS
Assistant State Conservationist

Enclosure

cc:

Troy J. Munsch, Assistant State Conservationist, NRCS, Manhattan, Kansas
w/enclosure

ec:

Terry K. Alstatt, Supervisory District Conservationist, NRCS, Belleville, Kansas
Lynn E. Thurlow, Soil Conservationist, NRCS, Salina, Kansas

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February 5, 2015

CERTIFIED-RETURN RECEIPT REQUESTED

Wetlands America Trust, Inc.
One Waterfowl Way
Memphis, Tennessee 38120

Dear Landowner:

Subject: Ownership Change for Agreement No. 66-6215-09-00NTF

Previous Landowners Wetlands America Trust, Inc.

New Landowner Kansas Department of Wildlife Parks and Tourism (KDWPT)
c/o Robert L. Unruh

Enclosed is a copy of the original Warranty Easement Deed (WED) for the Wetlands Reserve Program (WRP) easement property you have acquired. The WED grants and conveys forever to the United States of America, acting through and by the Natural Resources Conservation Service (NRCS), all rights, title and interest in the land comprising the easement area as described on Exhibit A of the WED.

Part II. of the WRP WED reserves to you the following rights on the easement area: title to the land, quiet enjoyment, control of public access, undeveloped recreational uses, and some subsurface resources. It was the intention of the original landowner to convey and relinquish any and all other property rights not so reserved. The easement constitutes a servitude upon the land so encumbered and binds subsequent landowners, their heirs, successors, assigns, lessees, and any other person claiming under them.

As such, landowners may not grant easements for public utilities across the WRP easement area. This would include rural water district lines, underground pipelines, electric lines above ground or buried or anything else that would cross the easement area. In addition, landowners will be held liable for any oil and gas lease activity that would have any impact to the surface of the WRP easement areas.

This letter also is to point out, as the new landowner(s) of the WRP easement listed above, that management and maintenance activities, which includes vegetation management (e.g. mowing, haying, prescribed burn, grazing) and hydrology management is a joint effort of the landowner and NRCS. Management, maintenance or any other activity implemented by the landowner will need to be requested and receive written authorization in the form of a compatible use authorization (CUA) for you to engage in any activity not reserved to the landowner under the WRP Warranty Easement Deed.

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DEC 01 2016 Phone: 785-823-4500
FAX: 885-533-5070
www.ks.nrcs.usda.gov

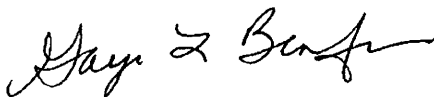
Natural Resources Conservation Service
760 South Broadway Boulevard
Salina, Kansas 67401-4604

To conduct any management, maintenance or other activity on the WRP easement area, a CUA may be requested at any time from NRCS. The WRP WED Part III.A. lists several activities and uses that have been acquired by the United States and are prohibited for the landowner on the easement area unless authorized as an allowable compatible use as stated in Part IV.B. of the WED.

The NRCS will evaluate whether the requested activity is consistent with the restoration objectives of the easement. The NRCS will only authorize activities that further the long-term protection and enhancement of the wetland functions and other natural values of the WRP easement area. A written notification will be issued stating whether such use is approved and any terms or conditions of the approval.

NRCS reserves the right to modify or cancel a CUA at any time if the NRCS determines that such activities do not further the protection and enhancement objectives of the easement. If you are unsure whether a CUA is needed, please contact Terry K. Alstatt, Supervisory District Conservationist, at the Belleville Field Office, telephone number 785-527-5573. NRCS looks forward to working with you in the management of these WRP easements.

Sincerely,



GAYE L. BENFER
Acting Assistant State Conservationist for Water Resources

Enclosure

cc:

Troy J. Munsch, Assistant State Conservationist, NRCS, Manhattan, Kansas
Terry K. Alstatt, Supervisory District Conservationist, NRCS, Belleville, Kansas
Alan R. Boerger, Resource Conservationist, NRCS, Manhattan, Kansas
Lynn E. Thurlow, Soil Conservationist, NRCS, Salina, Kansas

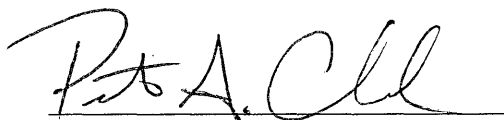
NATURAL RESOURCES CONSERVATION SERVICE SPECIFICATIONS

For
KDWPT Trost-Borchardt
Wetlands Reserve Program
Republic County, Kansas

Number	Title	Pages
202	Construction Surveys	3
203	Contractor Quality Control	2
249	Structure Removal	2
250	Mobilization and Demobilization	2
251	Pollution Control	3
252	Clearing and Grubbing	2
253	Seeding and Mulching	3
254	Earthfill	5
255	Excavation	3
256	Structure for Water Control	4
266	Range Planting	2
267	Chemical Weed Control	2
271	Turf Reinforcement Mat	2

These specifications are part of the construction plans. The work shall be performed in accordance with the drawings and specifications unless otherwise approved, in writing, by NRCS. For items of work requiring NRCS inspection, it is the responsibility of the contractor to keep the local NRCS office at Belleville, Kansas, informed of the progress of work so that timely inspections may be performed. Work installed without NRCS inspection will not be certified as meeting NRCS standards.

These specifications have been approved by the designer, Peter A. Clark, NRCS Design Engineer, who is responsible for the construction inspection of this site using these specifications and the approved drawings. This responsibility will be delegated to qualified field personnel in the Quality Assurance Plan for this site.



PETER A. CLARK, P.E.
Salina, Kansas

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3/1/16

Construction Specification 202—Construction Surveys

1. Scope

The work consists of performing all surveys, measurements, and computations required by this specification.

2. Equipment and material

Equipment for construction surveys shall be of a quality and condition to provide the required accuracy. The equipment shall be maintained in good working order and in proper adjustment at all times. Records of repairs, calibration tests, accuracy checks, and adjustments shall be maintained and be available for inspection by the engineer. Equipment shall be checked, tested, and adjusted as necessary in conformance with manufacturer's recommendations.

Material is field notebooks, stakes, templates, platforms, equipment, spikes, steel pins, tools, and all other items necessary to perform the work specified.

3. Quality of work

All work shall follow recognized professional practice and the standards of the industry unless otherwise specified in section 9 of this specification. The work shall be performed to the accuracy and detail appropriate for the type of job. Notes, sketches, and other data shall be complete, recorded neatly, legible, reproducible and organized to facilitate ease in review and allow reproduction of copies for job documentation. Survey equipment that requires little or no manual recording of field data shall have survey information documented as outlined in section 9 of this specification.

The minimum requirements for placing slope stakes shall be at 100-foot stations for tangents, as little as 25 feet for sharp curves, breaks in the original ground surface and at any other intermediate stations necessary to ensure accurate location for construction layout and measurement. Slope stakes and cross sections shall be perpendicular to the centerline. Significant breaks in grade shall be determined for cross sections. Distances shall be measured horizontally and recorded to the nearest 0.1 foot. Side shots for interim construction stakes may be taken with a hand level.

Unless otherwise specified in section 9 of this specification, measurements for stationing and establishing the location of structures shall be made to the nearest 0.1 foot.

Elevations for concrete work, pipes, and mechanical equipment shall be determined and recorded to the nearest 0.01 foot. Elevations for earth work shall be determined and recorded to the nearest 0.1 foot.

4. Primary control

The baselines and bench marks for primary control, necessary to establish lines and grades needed for construction, are shown on the drawings and have been located on the job site.

These baselines and bench marks shall be used as the origin of all surveys, layouts, and measurements to establish construction lines and grades. The contractor shall take all necessary precautions to prevent the loss or damage of primary control points. Any stakes or control points lost or damaged by construction activity will be reestablished by the contractor or at contractor expense.

5. Construction surveys

Before work starts that requires contractor performed surveys, the contractor shall submit in writing for the engineer's review: the name, qualifications, and experience of the individuals to be assigned to the survey tasks.

Contractor performed surveys shall include:

- checking and any supplemental or interim staking
- performing quantity surveys, measurements, and computations for progress payment
- other surveys as described in section 9 of this specification

6. Staking

The construction staking required for the item shall be completed before work on any item starts. Construction staking shall be completed as follows or as otherwise specified in section 9 of this specification:

Clearing and grubbing—The boundary of the area(s) to be cleared and grubbed shall be staked or flagged at a maximum interval of 200 feet, closer if needed, to clearly mark the limits of work. When contractor staking is the basis for determining the area for final payment, all boundary stakes will be reviewed by the engineer before start of this work item.

Excavation and fill—Slope stakes shall be placed at the intersection of the specified slopes and ground line. Slope stakes and the reference stakes for slopes shall be marked with the stationing, required cut or fill, slope ratio, and horizontal distance from the centerline or other control line. The minimum requirements for placing slope stakes is outlined in section 3, Quality of work.

Structures—Centerline and offset reference line stakes for location, alignment, and elevation shall be placed for all structures.

7. Records

All survey data shall be recorded in fully identified standard hard-bound engineering survey field notebooks with consecutively numbered pages or loose-leaf notebook sheets manually numbered. All field notes and printed data shall include the purpose or description of the work, the date the work was performed, weather data, sketches, and the personnel who performed and checked the work. Electronically generated survey data and computations shall be bound, page numbered, and cross referenced in a bound field notebook containing the index for all survey activities. All work shall follow recognized professional practice.

8. Payment

For items of work for which lump sum prices are established in the contract, payment is made as the work proceeds with progress payment amounts determined as a percentage of the total work planned as projected from the contractor's approved construction schedule. Payment of the lump sum contract price will constitute full compensation for completion of all work under this bid item.

Payment will not be provided under this item for the purchase price of materials or equipment having a residual value.

Compensation for any item of work described in the contract, but not listed in the bid schedule will be included in the payment for the item of work to which it is made subsidiary. Such items and the item to which they are made subsidiary are identified in section 9 of this specification.

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9. Items of work and construction details

The Government will perform basic layout and staking as detailed below prior to commencement of construction. Some staking can only occur after mowing and/or clearing and grubbing operations have been completed and staking in those areas will be completed within 5 working days after notification by the contractor. All reasonable efforts shall be made to preserve staking throughout the construction period. Reestablishing any staking that is disturbed by construction activity will be the contractor's responsibility.

All staking shall be done in accordance with Section 6 except that slope ratios are not required to be marked on stakes.

Bench Marks - The bench mark locations will be referenced to UTM-Feet coordinates. Elevations will be provided to the nearest 0.01 foot. The location and elevations of additional bench mark locations for construction staking and final checking will be supplied to the contractor.

Earthfill Stakeout - The earthfill will be staked at all 100-foot stations and at all grade breaks and changes in cross section of the earthfill using the slope stake method. Distances between staked stations will not exceed 100 feet. Fill toes will be marked with a fluorescent pink flag and anchored by a 1-inch x 2-inch stake at 500-foot stations only (unless warranted at intermediate stations). Otherwise, intermediate station toes shall be flagged only. The anchor stakes will show the station on the back of the stake. The fill to the top of the earthfill from ground level will be marked on the front and the distance to the centerline will be marked below the fill. Offsets at all stations are optional and the COR or Inspector will determine when they will be utilized.

Auxiliary Spillway Stakeout - The fill toe will be marked with a pink flag anchored by a stake at each 50-foot station. The station will be marked on the back of the anchor stake. The fill to the designed grade and the distance to the centerline of the spillway will be marked on the front..

Structure Stakeout - The station for a pipe location will be marked the same as a 500-foot station. In addition, an offset reference stake will be placed at least 10 feet from the toe location with the station and offset from centerline clearly marked on the stake.

Excavation Stakeout- The cut toes will be marked with a white flag at pre-determined locations established on the line representing the cut location on the drawings. Locations will be spaced at 25-foot to 100-foot distances depending on the curvature of the line. Distance between flags will not exceed 100 feet. The amount of cut to the designed bottom of the depression will be marked on the flag.

Other Area Stakeouts-Areas for mowing (approved disturbance areas) will be marked with orange flagging at maximum 200 foot intervals. Locations of pollution control measures will be marked with yellow flags.

The item of work to be performed in conformance with this specification and the construction detail is:

Subsidiary Item - Construction Surveys

- a) Notify the Engineer and/or Inspector when mowing or clearing operations are complete.
- b) Construction surveys will be as specified in Section 5 and include the reestablishment of any basic staking disturbed by construction activity.
- c) Survey control point locations shall be verified prior to starting work, and the Engineer shall be promptly notified of any discrepancies discovered.
- d) Measurement for progress payments for earthwork quantities may be estimated by the Contractor from load count or an equivalent measurement method (accuracy should be within +10 percent).
- e) Compensation for Construction Surveys will be included in the payment for Mobilization and Demobilization.

Construction Specification 203—Contractor Quality Control

1. Scope

The work consists of developing, implementing, and maintaining a quality control system to ensure that the specified quality is achieved for all materials and work performed.

2. Quality control system

The contractor shall develop, implement, and maintain a system of quality control to provide the specified material testing and verification of material quality before use. The system activities shall include procedures to verify adequacy of completed work, initiate corrective action to be taken, and document the final results. The identification of the quality control personnel and their duties and authorities shall be submitted to the contracting officer in writing within 15 calendar days after notice of award.

The quality control system shall include, but not be limited to, a rigorous examination of construction material, processes, and operation, including testing of material and examination of manufacturer's certifications as required, to verify that work meets contract requirements and is performed in a competent manner.

3. Quality control personnel

Quality control activities shall be accomplished by competent personnel. A competent person is: One who is experienced and capable of identifying, evaluating, and documenting that materials and processes being used will result in work that complies with the contract; and, who has authority to take prompt action to remove, replace, or correct such work or products not in compliance.

4. Records

The contractor's quality control records shall document both acceptable and deficient features of the work and corrective actions taken. All records shall be on forms approved by the contracting officer, be legible, and be dated and signed by the competent person creating the record.

Unless otherwise specified in section 6 of this specification, records shall include:

- a. Documentation of material delivered including quantity, storage location, and results of quality control examinations and tests.
- b. The determination that the material or item met the contract provisions and documentation that the engineer was notified.
- c. For deficient work, the nature of the defects, specifications not met, corrective action taken, and results of quality control activities on the corrected material or item.

5. Payment

For items of work for which lump sum prices are established in the contract, payment is made as the work proceeds, after presentation by the contractor of invoices showing related costs and evidence of charges by suppliers, subcontractors, and others for furnishing supplies and work performed. If the total of such payments is less than the lump sum contract price for this item, the remaining balance is included in the final contract payment. Payment of the lump sum contract price constitutes full compensation for completion of the work.

Payment is not made under this item for the purchase cost of material and equipment having a residual value.

Compensation for any item of work described in the contract, but not listed in the bid schedule, is included in the payment for the item of work to which it is made subsidiary. Such items and the items to which they are made subsidiary are identified in section 6.

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6. Items of work and construction details

The item of work to be performed in conformance with this specification and the construction detail is:

Subsidiary Item - Contractor Quality Control

- a) This item shall consist of furnishing the personnel required by the Contractor to perform the testing and inspection that is necessary to implement a quality control system that will ensure quality construction work.
- b) The contractor shall identify a quality control manager who shall be on-site or be available for immediate consultation during all periods of production work.
- c) Finished tops of dike earthfills shall be constructed to within +0.2 foot of the planned elevation. Finished dike earthfill slopes shall be constructed to within ± 0.3 foot of the planned elevation as calculated for any horizontal distance on the slope. The elevation difference shall not exceed 0.2 foot at successive staked stations along the slope line. The slope shall be nearly uniform (within 0.2 foot of true slope) from the top to bottom.
- d) Finished topsoil earthfill in level sections of auxiliary spillways shall be constructed to within +0.1'. Finished topsoil earthfill in the inlet and outlet sections of the auxiliary spillways shall be constructed to within $\pm 0.2'$ at any given station with no more than $\pm 0.1'$ variance from left to right sides.
- e) Finished excavation in depressions shall be constructed to within ± 0.3 foot of the planned elevation. The final bottom elevations of these depressions will be within $\pm 0.3'$ of the planned elevation shown on the drawings, but at least 50% of the area will be at the planned elevation or lower.
- f) Finished excavation in land smoothing areas shall be constructed to within ± 0.5 foot of the planned elevation.
- g) Excavation depths of anchor trenches for Turf Reinforcement Mat (TRM) shall be within ± 0.3 foot of the planned elevation.
- h) Contractor must furnish material certifications for the following specific items:
 - i. Sediment Control Measures
 - ii. Structure for Water Control
 - iii. Plastic Pipe
 - iv. Inlet Trash Guard
 - v. Outlet Animal Guard
 - vi. Seed (Critical Area Planting)
 - vii. Mulch
 - viii. Turf Reinforcement Mat
 - ix. Herbicide (Chemical Weed Control)
 - x. Seed (Range Planting)
- i) Compensation for Contractor Quality Control will be included in the payment for Mobilization and Demobilization.

Construction Specification 250—Mobilization and Demobilization

1. Scope

The work consists of the mobilization and demobilization of the contractor's forces and equipment necessary for performing the work required under the contract. It does not include mobilization and demobilization for specific items of work for which payment is provided elsewhere in the contract. Mobilization will not be considered as work in fulfilling the contract requirements for commencement of work.

2. Equipment and material

Mobilization shall include all activities and associated costs for transportation of contractor's personnel, equipment, and operating supplies to the site; establishment of offices, buildings, and other necessary general facilities for the contractor's operations at the site; premiums paid for performance and payment bonds including coinsurance and reinsurance agreements as applicable; and other items specified in section 4 of this specification.

Demobilization shall include all activities and costs for transportation of personnel, equipment, and supplies not required or included in the contract from the site; including the disassembly, removal, and site cleanup of offices, buildings, and other facilities assembled on the site specifically for this contract.

This work includes mobilization and demobilization required by the contract at the time of award. If additional mobilization and demobilization activities and costs are required during the performance of the contract as a result of changed, deleted, or added items of work for which the contractor is entitled to an adjustment in contract price, compensation for such costs will be included in the price adjustment for the item or items of work changed or added.

3. Payment

Payment will be made as the work proceeds, after presentation of paid invoices or documentation of direct costs by the contractor showing specific mobilization and demobilization costs and supporting evidence of the charges of suppliers, subcontractors, and others. When the total of such payments is less than the lump sum contract price, the balance remaining will be included in the final contract payment. Payment of the lump sum contract price for mobilization and demobilization will constitute full compensation for completion of the work.

Payment will not be made under this item for the purchase costs of materials having a residual value, the purchase costs of materials to be incorporated in the project, or the purchase costs of operating supplies.

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4. Items of work and construction details

Items of work to be performed in conformance with this specification and the construction details are:

Bid Item 3 - Mobilization and Demobilization

- a) This item consists of mobilization and demobilization of the contractor's forces and equipment necessary for the completion of the work.
- b) Transportation of any materials incorporated into the permanent works shall not be considered a mobilization item.
- c) All roads, culverts, bridges, sidewalks, parking lots, fences, structures, etc., shall be protected from damage during the contract period. Road surfaces shall be protected from damages by equipment.
- d) Access shall be as shown on the drawings. If alternate routes are obtained by the contractor, they must be approved by the engineer or the inspector prior to use. All access routes shall be restored by the contractor to a condition equal to or better than the condition prior to the commencement of work under this contract.
- e) Payment for Mobilization and Demobilization will be made at the contract lump sum price for the item and will constitute full compensation for all labor, equipment, tools, and other items necessary and incidental to the completion of the work. Payment will constitute compensation for the following related subsidiary items:
 - i. Construction Surveys - Construction Specification 202
 - ii. Contractor Quality Control – Construction Specification 203
 - iii. Site Preparation, Mowing - Construction Specification 250
 - iv. Non-Structural Pollution Control Measures - Construction Specification 251
 - v. Structural Sediment Pollution Control - Construction Specification 251

Subsidiary Item – Site Preparation, Mowing

- a) This item consists of mowing the designated area to reduce height of existing vegetation to allow staking for earthen construction as well as to shred the vegetation.
- b) Acceptable equipment for Site Preparation, Mowing includes rotary mower or flail shredder.
- c) The mowing operations will result in at least 90% of the vegetation mowed to a height of 12 inches or less throughout the designated areas. Vegetation should be chopped up to a degree that material will not blow from the site.
- d) The area of Site Preparation, Mowing will not be measured. Compensation for Site Preparation, Mowing, will be included in the payment for Mobilization and Demobilization.

Construction Specification 251—Pollution Control

1. Scope

The work consists of installing measures or performing work to control erosion and minimize the production of sediment and other pollutants to water and air from construction activities.

2. Material

All material furnished shall meet the requirements of the material specifications listed in section 8 of this specification.

3. Erosion and sediment control measures and works

The measures and works shall include, but are not limited to, the following:

Staging of earthwork activities—The excavation and moving of soil materials shall be scheduled to minimize the size of areas disturbed and unprotected from erosion for the shortest reasonable time.

Seeding—Seeding to protect disturbed areas shall occur as soon as reasonably possible following completion of that earthwork activity.

Mulching—Mulching to provide temporary protection of the soil surface from erosion.

Diversions—Diversions to divert water from work areas and to collect water from work areas for treatment and safe disposition. They are temporary and shall be removed and the area restored to its near original condition when the diversions are no longer required or when permanent measures are installed.

Stream crossings—Culverts or bridges where equipment must cross streams. They are temporary and shall be removed and the area restored to its near original condition when the crossings are no longer required or when permanent measures are installed.

Sediment basins—Sediment basins collect, settle, and eliminate sediment from eroding areas from impacting properties and streams below the construction site(s). These basins are temporary and shall be removed and the area restored to its original condition when they are no longer required or when permanent measures are installed.

Sediment filters—Straw bale filters or geotextile sediment fences trap sediment from areas of limited runoff. Sediment filters shall be properly anchored to prevent erosion under or around them. These filters are temporary and shall be removed and the area restored to its original condition when they are no longer required or when permanent measures are installed.

Waterways—Waterways for the safe disposal of runoff from fields, diversions, and other structures or measures. These works are temporary and shall be removed and the area restored to its original condition when they are no longer required or when permanent measures are installed.

Other—Additional protection measures as specified in section 8 of this specification or required by Federal, State, or local government.

4. Chemical pollution

The contractor shall provide watertight tanks or barrels or construct a sump sealed with plastic sheets to collect and temporarily contain chemical pollutants, such as drained lubricating or transmission fluids, grease, soaps, concrete mixer washwater, or asphalt, produced as a by-product of the construction activities. Pollutants shall be disposed of in accordance with appropriate State and Federal regulations. At the completion of the construction work, tanks, barrels, and sumps shall be removed and the area restored to its original condition as specified in section 8 of this specification. Sump removal shall be conducted without causing pollution.

Sanitary facilities, such as chemical toilets, or septic tanks shall not be located next to live streams, wells, or springs. They shall be located at a distance sufficient to prevent contamination of any water source. At the completion of construction activities, facilities shall be disposed of without causing pollution as specified in section 8 of this specification.

5. Air pollution

The burning of brush or slash and the disposal of other materials shall adhere to state and local regulations.

Fire prevention measures shall be taken to prevent the start or spreading of wildfires that may result from project activities. Firebreaks or guards shall be constructed and maintained at locations shown on the drawings.

All public access or haul roads used by the contractor during construction of the project shall be sprinkled or otherwise treated to fully suppress dust. All dust control methods shall ensure safe construction operations at all times. If chemical dust suppressants are applied, the material shall be a commercially available product specifically designed for dust suppression and the application shall follow manufacturer's requirements and recommendations. A copy of the product data sheet and manufacturer's recommended application procedures shall be provided to the engineer 5 working days before the first application.

6. Maintenance, removal, and restoration

All pollution control measures and temporary works shall be adequately maintained in a functional condition for the duration of the construction period. All temporary measures shall be removed and the site restored to near original condition.

7. Measurement and payment

For items of work for which lump sum prices are established in the contract, payment will be prorated and provided in equal amounts on each monthly progress payment estimate. The number of months used for prorating shall be the number estimated to complete the work as outlined in the contractor's approved construction schedule. The final month's prorate amount will be provided with the final contract payment. Payment as described will constitute full compensation for completion of the work.

Compensation for any item of work described in the contract, but not listed in the bid schedule is included in the payment for the item of work to which it is made subsidiary. Such items, and the items to which they are made subsidiary, are identified in section 8 of this specification.

8. Items of work and construction details

Items of work to be performed in conformance with this specification and the construction details are:

Subsidiary Item - Non-Structural Pollution Control Measures

- a) This item shall consist of providing a sanitary toilet facility for the job site, the collection and disposal of chemical pollutants, and the scheduling of construction activities to control the production of sediment.
- b) Chemical Pollution Control
 - i. All waste and/or used oils and grease shall be caught in containers suitable for the storage and transportation of such pollutants. All materials shall be transported to a commercial chemical disposal facility capable of either recycling or disposing of the pollutants. The manifest(s) for all chemical pollutants and other materials removed from the site shall be, upon request, made available to the Contracting Officer or the Contracting Officer's Representative. The manifest(s) shall include the date of transport, destination, description of materials transported, name of the recipient recycling facility or recipient disposal facility.
 - ii. Soil materials contaminated by chemical pollutants shall be disposed of with the pollutant materials.
 - iii. At the completion of construction, all sanitary facilities shall be removed from the site. Any materials contaminated by the sanitary facilities, their installation, operation, or removal shall immediately be removed and disposed of in accordance with all federal, state, and local regulations.
 - iv. An earthen dike will be constructed and maintained around all fuel storage tanks. The height of the dike will be as needed to contain the stored fuel without overtopping.
 - v. All areas disturbed by pollution cleanup operations shall be restored to as nearly original conditions as practicable.
- c) No separate payment will be made for Non-Structural Pollution Control Measures. Compensation for Non-Structural Pollution Control Measures will be included in the payment for Mobilization and Demobilization.

Subsidiary Item - Structural Sediment Pollution Control

- a) This item shall consist of the installation and maintenance structural measures required for control of sediment pollution including silt fence barriers or straw bale barriers.
- b) Structural sediment control measures shall be in place prior to beginning operations when practical.
- c) Silt fence barriers and straw bale barriers or a combination of these measures shall be installed where indicated on the drawings. The Engineer may identify additional locations requiring these control measures during the course of construction. All materials used for constructing silt fence barriers and straw bale barriers shall be approved by the Engineer prior to installation.
- d) All structural sediment control measures shall be maintained until no longer needed. Such maintenance shall include clean out of accumulated sediment and debris and maintenance of vegetation or mulch.
- e) All structural sediment pollution control measures shall be removed at the completion of the phase of work for which they are used. Such removal shall be with the approval of the Engineer after Critical Area Planting and Mulching operations are approved.
- f) The length of Structural Sediment Pollution Control will not be measured. The estimated quantities are shown on the drawings. No separate payment will be made for Structural Sediment Pollution Control. Compensation for Structural Sediment Pollution Control will be included in the payment for Mobilization and Demobilization.

Construction Specification 252—Clearing and Grubbing

1. Scope

The work consists of clearing, grubbing, and disposing of trees, snags, logs, brush, stumps, shrubs, and rubbish from the designated areas.

2. Protection of existing vegetation

Trees and other vegetation designated to remain undisturbed shall be protected from damage throughout the duration of the construction period. Any damages resulting from the contractor's operations or neglect shall be repaired or replaced by the contractor.

3. Marking

The limits of the area(s) to be cleared and grubbed will be marked by stakes, flags, tree markings, or other suitable methods. Trees to be left standing and uninjured will be designated by special markings that are conducive to preventing injury to the tree and shall be placed on the trunk about 6 feet above the ground surface.

4. Clearing and grubbing

All trees not marked for preservation and all snags, logs, brush, stumps, shrubs, rubbish, and similar materials shall be cleared from within the limits of the designated areas. Unless otherwise specified, all stumps, roots, and root clusters that have a diameter of 1 inch or larger shall be grubbed out to a depth of at least 2 feet below subgrade for concrete structures and 1 foot below the ground surface at embankment sites and other designated areas.

Land Clearing, Light Cover is for areas dominated by relatively small trees and/or brush with diameter less than 3 inches.

Land Clearing, Heavy Cover is for areas dominated by larger trees with diameter greater than 12 inches.

Land Clearing, Medium Cover is for areas dominated with trees and /or brush with diameters less than 12 inches but larger than 3 inches.

5. Herbicide Products, Rates, and Application Methods

The selected herbicide(s) shall be labeled for the intended use, rate of application and method of application. The selected herbicide shall be based on the recommendations found in Kansas State University Extension publication 2015 Chemical Weed Control, SRP-1117 or as specified in Section 9.

6. General Herbicide Criteria

All pest management methods must comply with federal, state, and local regulations. This includes management plans for invasive species, noxious weeds, and disease vectors. Compliance with the Food Quality Protections Act, Federal Insecticide, Fungicide and Rodenticide Act, Worker Protection Standard and Interim Endangered Species Protection Program is required. All restrictions and requirements listed on the product label will be adhered to. A safety plan for individuals exposed to chemicals will be in place including telephone numbers for emergency treatment centers. Signs will be posted around sites that have been treated as required by the herbicide label. Properly dispose of excess herbicide and herbicide containers. Application equipment shall be calibrated according to KSU Extension and/or manufacturer recommendations. Worn nozzles, cracked hoses or other faulty equipment will be replaced before application.

7. Disposal

All materials cleared and grubbed from the designated areas shall be disposed of at locations shown on the drawings or in a manner specified in section 9. The contractor is responsible for complying with all local rules and regulations and the payment of any and all fees that may result from disposal at locations away from the project site.

8. Measurement and payment

Compensation for any item of work described in the contract (but not listed in the bid schedule) will be included in the payment for the item of work to which it is made subsidiary. Such items and the items to which they are made subsidiary are identified in section 9.

9. Items of work and construction details

Items of work to be performed in conformance with this specification and the construction details are:

Bid Item 4 – Clearing and Grubbing

- a) Sections 5 and 6 do not apply for this project.
- b) This item shall consist of clearing trees, grubbing roots, and disposing of materials on the construction site as designated on the drawings or as staked in the field.
- c) All woody debris is to be buried in Waste Disposal Trench areas as shown on the drawings. Debris must be chipped, ground, or burned prior to being buried. Materials to be disposed of by burying shall be covered with earth to a depth of at least two (2) feet. The cover shall be placed in a minimum of two lifts with each lift compacted by traversing the entire surface with one tread track of the material placement equipment. The top lift shall be mounded at least six (6) inches higher than the surrounding undisturbed area to prevent unsightly depressions after settlement. The finished surface of the disposal area shall be uniformly graded to prevent ponding of water.
- d) The area to be cleared and grubbed will not be measured by and payment will be made at the lump sum price for Clearing and Grubbing in the contract. Payment will constitute full compensation for all labor, equipment, tools, and all other items necessary and incidental to the completion of the work. Payment will constitute compensation for the following related subsidiary item(s):
 - i. Excavation, Waste Disposal Trench, Construction Specification 255

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Construction Specification 253—Seeding and Mulching

1. Scope

The work consists of preparing the area for treatment; furnishing and placing seed, mulch, fertilizer, inoculant, lime, and other soil amendments; and anchoring mulch in designated areas as specified.

2. Material

Seed—Seed labeling, quality, and seed testing shall be in accordance with Kansas Seed Law. For Kansas Seed Law, the germination test is valid for nine (9) months after the end of the month the test was made so long as the seed remains in Kansas. Federal Seed Law pertains to seed shipped across state lines and the germination test is valid for five (5) months after the end of the month the test was made.

Where named varieties are not available, common (native harvest) seed from a source location as near to the area being seeded as possible may be utilized. For mileage restriction, native grass seed will not be used more than 250 to 400 miles north of or 100 to 150 miles south of its point of origin and an increase of elevation of 1500 feet. Seed from a southern source will be given preference over seed from a northern source. Seed source must be identified to the state and county level in order to certify mileage and elevation adequacy.

For seed purchased during the valid period of the germination test, the analysis report may be considered current for the full seeding period in effect at the time of purchase. For example, if seed is purchased March 1 and the germination test date expires March 31, the analysis report may be considered current if the seed is planted by May 15. If the seed is to be planted during a later seeding season, a new germination test shall be performed.

Hay Mulch material—Hay Mulch shall consist of cut native prairie grass hay or wheat, barley, oat, or rye straw as specified in section 6. The mulch material shall be air-dry, and shall not be musty, moldy, caked, or otherwise of low quality. The use of mulch that contains noxious weeds is not permitted. The contractor shall provide a method satisfactory for determining weight of mulch furnished such as scale tickets.

3. Seedbed preparation and treatment

Areas to be treated shall be dressed to a smooth, firm surface. On sites where equipment can operate on slopes safely, the seedbed shall be tilled to a depth of 3 inches and smoothed. Soil should be firm enough as to not create a footprint more than a quarter inch deep. Depending on soil and moisture conditions, disking or cultipacking, or both, may be necessary to properly prepare a seedbed. Where equipment cannot operate safely, the seedbed shall be prepared by hand methods by scarifying to provide a roughened soil surface so that broadcast seed will remain in place.

If seeding is to be accomplished immediately following construction operations, seedbed preparation may not be required except on a compacted, polished, or freshly cut soil surface.

All debris, such as rocks larger than 6 inches in diameter, trash, weeds, and other objects that will interfere with seeding or maintenance operations, shall be removed or disposed of as specified in section 6.

4. Seeding, mulching, stabilizing and dates of planting

All seeding operations shall be performed in such a manner that the seed is applied in the specified quantities uniformly in the designated areas. The method and rate of seed application and the approved planting dates shall be as specified in section 6.

The rate, amount, and kind of mulching shall be as specified in section 6. Mulches shall be applied uniformly to the designated areas. They shall be applied to areas seeded not later than 2 working days after seeding has been performed. Mulch materials shall be stabilized within 24 hours of application using a mulch crimper or equivalent anchoring tool or by an asphalt emulsion product. When the mulch crimper or equivalent anchoring tool is used, it shall have straight blades and be the type manufactured expressly for and capable of firmly punching the mulch into the soil. Where the equipment can be safely operated, it shall be operated on the contour. Hand methods shall be used where equipment cannot safely operate to perform the work required.

5. Measurement and payment

For items of work for which specific unit prices are established in the contract, each area treated will be measured as specified in section 6 and the area calculated to the nearest 0.1 acre. Payment for treatment is made at the contract unit price for the designated treatment, which will constitute full compensation for completion of the work.

For items of work for which specific lump sum prices are established in the contract, the quantity of work will not be measured for payment. Payment for this item is made at the contract lump sum price for the item and will constitute full compensation for the completion of the work.

Compensation for any item of work described in the contract, but not listed in the bid schedule is included in the payment for the item of work to which it is made subsidiary. Such items and the item(s) to which they are made subsidiary are identified in section 6.

6. Items of work and construction details

Items of work to be performed in conformance with this specification and the construction details are:

Bid Item 5 – Critical Area Planting and Mulching

- a) This item consists of preparing the seedbed and placing seed and mulch to approximate limits shown on the plans or as staked in the field.
- b) The spillway areas to be covered with Turf Reinforcement Mat (TRM) shall not have mulch applied, otherwise all areas designated to receive critical area planting shall also be mulched.
- c) The seeding operation shall be completed within two (2) days after final grading is completed and approved. Mulching shall be completed as required in Section 4.
- d) All accessible areas shall be sown with a grass drill. The seed shall be placed 1/4 to 1/2 inch deep. The drill shall be equipped with double disc or coulter furrow openers with depth bands and press wheels spaced not more than 12 inches apart. Small, inaccessible areas or wet areas may be broadcast seeded. Broadcast areas shall be lightly harrowed or raked the same day the seed is spread.
- e) The narrow perimeter areas of the TRM anchor trenches shall be hand seeded after backfill and smoothing. Mulching of these narrow areas is not required.
- f) Mulch materials shall consist of native prairie grass hay or clean straw. The mulch shall be applied at a rate of 2 tons per acre. If mulch is applied on or after July 15, current year hay cutting shall be used. If mulch is applied before July 15, hay shall be no older than the previous year's cutting. All mulch hay shall be visually inspected and approved by the inspector prior to application. The mulch shall be applied at a rate of 2 tons per acre. The mulch shall be anchored by using a straight, serrated disc weighted to press the mulch into the soil a minimum of 2 inches. Spacing between discs shall not exceed 12 inches. No area shall be mulched that cannot be anchored in the same day's operation. Weight tickets on each load of mulch shall be delivered to the inspector prior to the application. All areas seeded shall be mulched.
- g) The seed mixture shall be as follows for the designated area. The actual quantity of seed and mulch applied will be based on the designed quantity shown on the plans.

<u>Species</u>	<u>Pounds per Acre in "Pure Live Seed" (PLS)</u>
Kaw Big Bluestem	1.2
Aldous Little Bluestem	1.2
Sharps Improved Buffalo Grass	1.0
Blackwell Switchgrass	1.5
El Reno Sideoats Grama	1.8
Lovington Blue Grama	0.45
Cheyenne Indiangrass	1.2

- h) The area to be seeded and mulched will not be measured. Payment will be made at the lump sum price for seeding and mulching established in the contract bid schedule for Critical Area Planting and Mulching. Payment will constitute full compensation for all labor, equipment, tools, and all other items necessary and incidental to the completion of the work.

Construction Specification 254—Earthfill

1. Scope

The work shall consist of the construction of all earthfill structures and earth backfills required by the drawings and specifications.

Earthfill is composed of natural earth materials that can be placed and compacted by construction equipment operated in a conventional manner.

Earth backfill is composed of natural earth material placed and compacted in confined spaces or adjacent to structures (including pipes) by hand tamping, manually directed power tampers or vibrating plates or their equivalent.

2. Material

Fill material shall be obtained from required excavations and/or designated borrow areas. The selection, blending, routing, and disposition of material in the various fills shall be subject to approval by the engineer.

Fill material shall be free of sod, brush, roots, trash, or other objectionable material. Rock particles larger than 6 inches shall be removed prior to compaction of the fill.

3. Foundation preparation

The earth foundation surface shall (after stripping and before placing the first layer of earthfill) be graded to remove surface irregularities, be scarified and moisture-conditioned to a minimum depth of 2 inches to facilitate compaction and a good bond with the earthfill. The moisture content of the foundation materials at the time of compaction shall be the same as the earthfill to be placed on the foundation.

No embankment material shall be placed upon the earth surfaces of excavations, foundation preparation, or previous embankment when such surfaces have dried sufficiently to form shrinkage cracks. Such earth surfaces being readied for embankment shall have all loose, hard, dry, and cracked material removed and then scarified and moisture conditioned to a minimum depth of 2 inches.

4. Placement

Earthfill shall not be placed upon a frozen surface nor shall snow, ice, or frozen material be incorporated into the earthfill matrix.

Earthfill shall be placed in approximately horizontal layers starting at the lowest point in the foundation. The earthfill materials shall be placed in nearly horizontal layers not exceeding 9 inches before compaction or as shown on the drawings. Materials placed by dumping in piles or windrows shall be spread uniformly to not more than the specified thickness before being compacted.

Machine compaction shall be accomplished by the controlled movement of hauling and spreading equipment over the fill area. Every point on the surface of each lift shall be traversed by not less than one tread track of the equipment.

Hand compaction shall be required in areas inaccessible to heavy equipment. The hand-compacted fill shall be compacted by hand tamping or manually directed power tampers or plate vibrators. The backfill shall consist of clay material (CL or SC) free of stones larger than 2 inches. The fill shall be placed in layers not more than 4 inches thick before compaction. Such protective measures as necessary shall be taken to ensure that the fill does not dry sufficiently to form cracks after placement.

5. Control of moisture content

The moisture content of the fill material for dozer and machine compaction shall be adequate for efficient blending and bonding of the materials for obtaining the required compaction. Material being placed shall be sufficiently moist to prevent dusty conditions and sufficiently dry to be workable (without excessive rutting of the compacted surface by the earthmoving equipment). Tracks from the earthmoving equipment should not exceed one-half of the compacted fill layer depth. Material that is too wet shall be dried to meet this requirement and material that is too dry shall be wetted and mixed until the requirement is met.

The moisture content of the material for hand compaction shall be near the optimum moisture content. For clays and silts, the moisture content shall be such that a ball formed with the hands does not crack or separate when struck sharply and will easily ribbon out between the thumb and finger. For sand-silt and sand-clay mixtures, the moisture shall be such that a ball can be formed but which readily breaks and crumbles with pressure.

6. Measurement and payment

For items of work for which specific lump sum prices are established in the contract, the quantity of work will not be measured for payment. Payment for this item will be made at the contract lump sum price and will constitute full compensation for completion of the work.

Compensation for any item of work described in the contract (but not listed in the bid schedule) is included in the payment for the item of work to which it is made subsidiary. Such items and the items to which they are made subsidiary are identified in section 7 of this specification.

7. Items of work and construction details

Items of work to be performed in conformance with this specification and the construction details are:

Bid Item 6- Earthfill, Dikes

- a) This item shall consist of the construction of the earthfill required for the dikes as shown on the drawings. The lower limits of the work shall conform to the approved surface of the foundation after the stripping operation. The completed work shall conform to the lines, grades, and elevations shown on the drawings or as staked in the field.
- b) Stockpiled topsoil from the stripping operation will be placed on the outer portion of earthfill structure as a part of each lift. Topsoil shall not be less than 6 inches or more than 2 feet thick measured vertically and shall be compacted concurrently with the earthfill. Material from the stripping operation that contains excessive amounts of organic matter shall not be used as earthfill or earth backfill material.
- c) After excavation of Stripping and prior to placement of earthfill, as approved by the inspector, the foundation of the dike shall be compacted as specified in section 4.
- d) The material for the center core of Dike 1 and Dike 2 shall come from Depression 1 and Depression 2 respectively. Material from land smoothing areas shall be used for dike 3 and for the layers between the center core and topsoil on Dike 1 and Dike 2.
- e) The dike shall be constructed in the locations shown on the plans or as staked in the field. The tolerances shall be as stated in Construction Specification 203, Contractor Quality Control.
- f) The volume of Earthfill, Dikes will not be measured. Payment will be based on the on the design quantity shown on the drawings. Payment will be made at the contract lump sum price established in the Bid Schedule for Earthfill, Dikes, and will constitute full compensation for all labor, equipment, tools, and all other items necessary and incidental to the completion of the work. Payment will constitute compensation for the following related subsidiary items:
 - i. Excavation, Stripping, Dikes, Construction Specification 255
 - ii. Excavation, Stripping, Topsoil, Spillways Construction Specification 255
 - iii. Excavation, Depressions 1-2, Construction Specification 255
 - iv. Earthfill, Auxiliary Spillway Berms, Construction Specification 254
 - v. Earthfill, Auxiliary Spillways, Construction Specification 254
 - vi. Topsoil Replacement, Auxiliary Spillways, Construction Specification 254
 - vii. Waste Disposal Trench, Construction Specification 255

Subsidiary Item – Earthfill, Auxiliary Spillway Berms

- a) This item shall consist of the construction of the earthfill required for the Auxiliary Spillway Berms as shown on the drawings. The lower limits of the work shall conform to the approved surface of the foundation after the stripping operation. The completed work shall conform to the lines, grades, and elevations shown on the drawings or as staked in the field.
- b) Stockpiled topsoil from the stripping operation will be placed on the outer portion of earthfill structure as a part of each lift. Topsoil shall not be less than 6 inches or more than 2 feet thick measured vertically and shall be compacted concurrently with the earthfill. Material from the stripping operation that contains excessive amounts of organic matter shall not be used as earthfill or earth backfill material.
- c) After excavation of Stripping and prior to placement of earthfill, as approved by the inspector, the foundation of the berms shall be compacted as specified in section 4.

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- d) The berms shall be constructed in the locations shown on the plans or as staked in the field. The tolerances shall be as stated in Construction Specification 203, Contractor Quality Control.
- c) The volume of Earthfill Auxiliary Spillway Berms will not be measured. The estimated quantities are shown on the drawings. No separate payment will be made for Earthfill Auxiliary Spillway Berms. Compensation for Earthfill Auxiliary Spillway Berms will be included in the payment for Earthfill, Dikes as appropriate.

Subsidiary Item - Earthfill, Auxiliary Spillways

- a) This item shall consist of the construction of the earthfill required for the auxiliary spillways as shown on the drawings. The completed work shall conform to the lines, grades, and elevations shown on the drawings or as staked in the field.
- b) Stockpiled topsoil from the stripping operation will be placed on the outer portion of earthfill structure as a part of each lift. Topsoil shall not be less than 6 inches or more than 2 feet thick measured vertically and shall be compacted concurrently with the earthfill. Material from the stripping operation that contains excessive amounts of organic matter shall not be used as earthfill or earth backfill material.
- c) After excavation of Stripping and prior to placement of earthfill, as approved by the inspector, the foundation of the auxiliary spillways shall be compacted as specified in section 4.
- d) The spillways shall be constructed in the locations shown on the plans or as staked in the field. The tolerances shall be as stated in Construction Specification 203, Contractor Quality Control.
- e) No separate payment will be made for Earthfill, Auxiliary Spillways. Compensation for Earthfill, Auxiliary Spillways, will be included in the payment for Earthfill, Dikes.

Subsidiary Item - Earth Backfill, Hand Compacted

- a) This item shall consist of placing the hand compacted earth backfill required for the installation of the pipe, structure for water control, and Turf Reinforcement Mat (TRM) as shown on the drawings. The completed work shall conform to the lines, grades, and elevations shown on the drawings or as staked in the field.
- b) Manually directed power tampers or plate vibrators shall include only small hand-held or hand-directed compactors powered by compressed air, internal combustion engines, or electricity.
- c) No separate payment will be made for Earth Backfill, Hand Compacted. Compensation for Earth Backfill, Hand Compacted, will be included in the payments for Structure for Water Control or Turf Reinforcement Mats, as appropriate.

Subsidiary Item – Topsoil Replacement, Spillways

- a) This item shall consist of the replacement of the earthfill required for the topsoil on the areas occupied by the spillways as shown on the drawings.
- b) Stockpiled topsoil from the stripping operation will be placed on the subgrade to elevations and slopes required by the drawings.
- c) The volume of Topsoil Replacement, Spillways will not be measured. The estimated quantities are shown on the drawings. No separate payment will be made for Topsoil Replacement, Spillways. Compensation for Topsoil Replacement, Spillways will be included in the payment for Earthfill, Dikes as appropriate.

Bid Item 7 – Topsoil Replacement, Depressions 1-2

- a) This item shall consist of the replacement of the earthfill required for the topsoil on the areas occupied by Depressions 1-2 as shown on the drawings, including the bottom areas and side slopes.
- b) Stockpiled topsoil from the stripping operation will be placed on the subgrade to elevations and slopes required by the drawings.
- c) The volume of Topsoil Replacement, Depressions 1-2 will not be measured. Payment will be based on the on the design quantity shown on the drawings. Payment will be made at the contract lump sum price established in the Bid Schedule for Topsoil Replacement, Depressions 1-2, and will constitute full compensation for all labor, equipment, tools, and all other items necessary and incidental to the completion of the work. Payment will constitute compensation for the following related subsidiary items:
 - i. Excavation, Stripping, Topsoil, Depressions 1-2, Construction Specification 255

Construction Specification 255 — Excavation

1. Scope

The work shall consist of the excavation required by the drawings and specifications and disposal of the excavated materials.

2. Use of excavated material

To the extent they are needed, all suitable material from the specified excavations shall be used in the construction of required permanent earthfill or rockfill. The suitability of material for specific purposes is determined by the engineer. The contractor shall not waste or otherwise dispose of suitable excavated material.

3. Disposal of waste materials

All surplus or unsuitable excavated materials are designated as waste and shall be disposed of at the locations shown on the drawings or as staked in the field.

4. Borrow excavation

When the quantities of suitable material obtained from specified excavations are insufficient to construct the specified earthfill structures and earth backfill, additional material shall be obtained from the designated borrow area or contractor supplied borrow areas.

5. Overexcavation

Excavation in earth beyond the specified lines and grades shall be corrected by filling the resulting voids with approved, compacted earthfill. The exception to this is that if the earth is to become the subgrade for riprap, rockfill, sand or gravel bedding, or drainfill, the voids may be filled with material conforming to the specifications for the riprap, rockfill, bedding, or drainfill. Before correcting an overexcavation condition, the contractor shall review the planned corrective action with the engineer and obtain approval of the corrective measures.

6. Measurement

For items of work for which specific unit prices are established in the contract, the volume of excavation is measured and computed to the nearest cubic yard by the method of average cross-sectional end areas or by methods outlined in section 7 of this specification. The measurement is made to the specified limits except that excavation outside the specified lines and grades directed by the engineer to remove unsuitable material is included.

The measurement limits shall be defined as follows:

- a. The upper limit shall be the original ground surface as it existed before the start of construction operations.
- b. The lower and lateral limits shall be the true surface of the completed excavation as directed by the engineer.

For items of work for which specific lump sum prices are established in the contract, the quantity of work will not be measured for payment. Payment for this item will be made at the contract lump sum price and will constitute full compensation for completion of the work.

Compensation for any item of work described in the contract, but not listed in the bid schedule is included in the payment for the item of work to which it is made subsidiary. Compensation for such items is identified in section 7 of this specification.

7. Items of work and construction details

All excavations shall be constructed to the lines and grades shown on the drawings or as directed by the NRCS Engineer or their representative.

Items of work to be performed in conformance with this specification and the construction details therefor are:

Subsidiary Item - Excavation, Stripping, Dikes

- a) This item shall consist of stripping the entire area to be occupied by the dikes to depths of at least 6 inches below the original ground surface to provide earthfill materials for the outer portions of the dike.
- b) Stripping shall be sufficient to remove topsoil, rubbish, organic matter, and other perishable and objectionable material not suitable for the foundation of the dike or as earthfill in the dike.
- c) The volume of Excavation, Stripping will not be measured. The estimated quantities are shown on the drawings. No separate payment will be made for Excavation, Stripping. Compensation for Excavation, Stripping, Dikes will be included in the payment for Earthfill, Dike as appropriate.

Subsidiary Item - Excavation, Stripping, Topsoil, Spillways

- a) This item shall consist of stripping the entire area to be occupied by the spillways to depths of at least 6 inches below the original ground surface to provide earthfill materials for the outer portions of the spillways.
- b) Stripping shall be sufficient to remove and stockpile topsoil, to be re-placed in the spillways.
- c) The volume of Excavation, Stripping, Topsoil, Spillways will not be measured. The estimated quantities are shown on the drawings. No separate payment will be made for Excavation, Stripping. Compensation for Excavation, Stripping, Topsoil, Spillways will be included in the payment for Earthfill, Dikes, as appropriate.

Subsidiary Item - Excavation, Stripping, Topsoil, Depressions

- a) This item shall consist of stripping the entire area to be occupied by the depressions to depths of at least 6 inches below the original ground surface to provide earthfill materials for the outer portions of the dike.
- b) Stripping shall be sufficient to remove topsoil and stockpile topsoil, to be re-placed in the depressions.
- c) The volume of Excavation, Stripping, Topsoil, Depressions will not be measured. The estimated quantities are shown on the drawings. No separate payment will be made for Excavation, Stripping. Compensation for Excavation, Stripping, Topsoil, Depressions will be included in the payment for Topsoil Replacement, Depressions 1-2, as appropriate.

Subsidiary Item -- Excavation, Depressions 1-2

- a) This item shall consist of the excavation required for the construction of Depressions 1-2.
- b) The depressions shall be constructed in the locations shown on the drawings or as staked in the field. Bottom shall be left rough to provide irregular microtopography. The tolerances shall be as stated in Construction Specification 203, Contractor Quality Control.
- c) After topsoil stripping and stockpiling are completed, additional excavated materials shall be placed in the center core of the dikes as shown on the drawings.
- d) The volume of Excavation, Depressions 1-2 will not be measured. The estimated quantities are shown on the drawings. No separate payment will be made for Excavation, Depressions 1-2. Compensation for Excavation, Depressions 1-2, will be included in the payment for Earthfill, Dikes.

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Subsidiary Item – Excavation, Structure

- a) This item shall consist of the excavation required for the installation of the plastic pipe and structures for water control as shown on the drawings.
- b) Trenches excavated for the installation of the plastic pipe shall be at least 18” wider on both sides from the outside diameter of the pipe. The bottom of the trench shall be formed to nearly the same dimension of the pipe to provide support of the pipe haunches.
- c) Excavated materials that are suitable for earthfill shall be placed in the dikes.
- d) The volume of Excavation, Structure will not be measured and no separate payment will be made. Compensation for Excavation, Structure, will be included in the payment for Structure for Water Control.

Subsidiary Item – Excavation, TRM

- a) This item shall consist of the excavation required for the installation of the TRM as shown on the drawings.
- b) Trenches excavated for the installation of the TRM shall be approximately 12” wide and 12” deep.
- c) Excavated materials that are suitable for earthfill shall be re-placed in the anchor trenches as backfill according to Earth Backfill, Hand Compacted, Specification 254.
- d) The volume of Excavation, TRM will not be measured and no separate payment will be made. Compensation for Excavation, TRM, will be included in the payment for Turf Reinforcement Mat, as appropriate.

Subsidiary Item – Excavation, Waste Disposal Trench

- a) This item shall consist of the excavation required for trenches to burn and bury cleared trees and grubbed roots as shown on the drawings as well as for disposal of all unsuitable excavated materials as described in Section 3.
- b) Trenches excavated for the burning and burying shall be at least 4 feet deep.
- c) Excavated materials shall be temporarily placed adjacent to the waste disposal trench. Material shall be returned to the trench following burning in lifts and compacted as specified in Earthfill Specification 254. Top of fill shall be graded to drain and left smooth for seeding operations.
- d) The volume of Excavation, Waste Disposal Trench will not be measured and no separate payment will be made. Compensation for Excavation, Waste Disposal Trench, will be included in the payment for Clearing and Grubbing, as appropriate.

Construction Specification 256—Structure for Water Control

1. Scope

The work consists of furnishing and installing plastic pipe conduits, water level control structures, and the necessary fittings and appurtenances as shown on the drawings or as specified herein.

2. Material

Plastic pipe conduits shall be manufactured from either Polyvinyl Chloride (PVC) materials or Polyethylene (PE) materials. The water control structure shall be a pre-fabricated, water tight structure constructed of PVC, fiberglass, or other suitable materials. All pipe, fittings, and gaskets shall conform to the requirements as specified in section 9 of this specification or as shown on the drawings.

3. Laying the pipe

Plastic pipe conduits complete with fittings and other related appurtenances shall be installed to the lines and grades shown on the drawings or specified in section 9 of this specification. The pipe shall be installed so that there is no reversal of grade between joints unless otherwise shown on the drawings. The pipe foundation shall be excavated a minimum of 6 inches lower than the pipe grade shown on the drawings or staked in the field whenever bedrock, boulders, cobbles, or other material that may cause pipe damage is encountered at planned pipe grade. The pipe shall not be dropped or dumped on the bedding or into the pipe trench.

Just before placement, each pipe section shall be inspected to ensure that all foreign material is removed from inside the pipe. The pipe ends and the couplings shall be free of foreign material when assembled. At the completion of a work shift, all open ends of the pipeline shall be temporarily closed off using a suitable cover or plug.

4. Pipe embedment

Earth bedding—The pipe shall be firmly and uniformly placed on compacted earthfill bedding or an in-place earth material capable of supporting the pipe without noticeable settlement. The earth material on which the pipe is placed shall be of uniform density to prevent differential settlement. Unless otherwise specified, a groove that closely conforms to the outside surface of the pipe shall be formed in the bedding. The depth of the groove shall be equal to or greater than 0.3 of the pipe diameter.

5. Backfill

Initial backfill—Unless otherwise specified, initial backfill to 6 inches above the top of the conduit is required. Earth haunching and initial backfill material shall consist of soil material that is free of rocks, stones, or hard clods more than 1 inch in diameter. Coarse backfill material shall be the specified sand, gravel, crushed rock, or drainfill material.

Initial backfill shall be placed in two stages. In the first stage (haunching), backfill is placed to the pipe spring line (center of pipe). In the second stage, it is placed to 8 inches above the top of the pipe.

The first stage material shall be worked carefully under the haunches of the pipe to provide continuous support throughout the entire pipe length. The haunching backfill material shall be placed in layers that have a maximum thickness of about 6 inches and are compacted as specified in section 9 of this specification or as shown on the drawings. During compaction operations, care shall be taken to ensure that the tamping or vibratory equipment does not come in contact with the pipe and the pipe is not deformed or displaced.

Final backfill—Final backfill shall consist of placing the remaining material required to complete the backfill from the top of the initial backfill to the ground surface, including mounding at the top of the trench. Final backfill material within 2 feet of the top of the pipe shall be free of debris or rocks larger than 3 inches nominal diameter. Coarse backfill material shall be the specified sand, gravel, crushed rock, or drainfill. Final backfill

shall be placed in approximately uniform, compacted layers. Final backfill compaction requirements shall be as specified in section 9 of this specification or as shown on the drawings.

Vehicles or construction equipment shall not be allowed to cross the pipe until the minimum earth cover and required density as specified in section 9 of this specification has been obtained.

7. Joints

Unless otherwise specified in section 9 of this specification or shown on the drawings, joints shall be either bell and spigot type with elastomeric gaskets, coupling type, solvent cement bell and spigot, or jointed by butt heat fusion. When a lubricant is required to facilitate joint assembly, it shall be a type having no deleterious affect on the gasket or pipe material.

Pipe joints shall be watertight at the pressures specified except where unsealed joints are indicated.

Pipe shall be installed and joined in accordance with the manufacturer's recommendations. Laying deflections and joint fitting or stab depths shall be within the manufacturer's recommended tolerances.

8. Measurement and payment

For items of work for which specific unit prices are established in the contract, the quantity of each kind, size, and class of pipe is determined to the nearest foot by measurement of the laid length along the crown centerline of the conduit. Payment for each kind, size, and class of pipe is made at the contract unit price for that kind, size, and class. Such payment constitutes full compensation for furnishing, transporting, and installing the pipe including excavation, shoring, backfill, bedding, thrust blocks, and all fittings, appurtenances, and other items necessary and incidental to the completion of the work. Payment for appurtenances listed separately in the bid schedule is made at the contract prices for those items.

Compensation for any items of work described in the contract, but not listed in the bid schedule, is included in the payment for the item of work to which it is made subsidiary. Such items and items to which they are made subsidiary are identified in section 9 of this specification.

9. Items of work and construction details

Items of work to be performed in conformance with this specification and the construction details are:

Bid Item 8 - Structure for Water Control

- a) This item shall consist of furnishing and installing the three inline water control structures. It shall include all fittings and other items necessary and incidental to the installation as shown on the drawings.
- b) The height of the inline water control structures shall be as shown on the plans, and the inlet and outlet connectors shall be sized to connect to the drawdown pipe with flexible sewer couplers. The structures shall be installed with the invert elevations as shown on the drawings or staked in the field.
- c) The walls and floor of the inline water control structures shall be constructed of polyvinyl chloride (PVC). Box structures shall have a minimum wall thickness of 1/2 inch and have metal reinforced corners. The structures shall have a hinged, lockable metal top with vent grate. Any joints in the structure shall be sealed.
- d) The stoplogs shall be constructed of 1/2 inch PVC and shall be constructed so that a seal is provided between individual stoplogs installed in the structure and between the stoplogs and the stoplog track. The stoplogs shall have stainless steel lifting hooks, and a handle shall be provided for use when installing or removing stoplogs. An adequate number of stoplogs shall be provided to total elevation difference from the bottom of the structure to the top of the stoplogs as shown on plans
- e) Water control structures constructed of suitable materials and providing similar flow characteristics may be substituted with the approval of the Design Engineer.
- f) The earth backfill adjacent to the inline water control structure shall meet the requirements of Earth Backfill, Hand-Compacted.
- g) Prior to placing and compacting earth backfill adjacent to the inline water control structure, sufficient support shall be placed inside the structure to protect from compression that would affect installation of stoplogs.
- h) Payment will be based on the on the designed quantity shown on the drawings. Payment will be made at the contract lump sum price established in the Bid Schedule for Structure for Water Control, and will constitute full compensation for all labor, equipment, tools, and all other items necessary and incidental to the completion of the work. Payment will constitute compensation for the following related subsidiary item(s):
 - (1) Earth Backfill, Hand-Compacted, Construction Specification 254
 - (2) Excavation, Structure, Construction Specification 255
 - (3) Plastic Pipe, 12-Inch Diameter, Construction Specification 256

Subsidiary Item - Plastic Pipe, 12-Inch Diameter

- a) This item shall consist of furnishing and installing the 12-inch pipe in the dikes at the three locations shown on the drawings. It shall include all fittings and other items necessary and incidental to the installation as shown on the drawings.
- b) PVC pipe shall conform to ASTM D3034-SDR 35 or ASTM F949-PS 46. PE Pipe shall be profile wall pipe and conform to ASTM F2648.
- c) The pipe joints shall be bell and spigot with an elastomeric gasket. They shall be considered water tight for pressures less than 10 psi.
- d) The inlet trash guard shall be equivalent to an Agri-Drain heavy duty bar guard and be attached to the pipe using a single u-bolt or similar methods. Inlet trash guard shall function to limit debris and animals from entering and clogging the pipe and control structure while providing increased area for water intake when bars are partially blocked.

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- e) The outlet animal guard shall be a manufactured guard. Outlet animal guard shall function to limit debris and animals from entering and clogging the pipe and control structure from outlet end while rotating to allow debris to pass coming from inlet end.
- f) The length of Plastic Pipe will not be measured. Compensation for Plastic Pipe, 12-Inch Diameter will be included in the payment for Structure for Water Control.

Construction Specification 266—Range Planting

1. Scope

The work consists of preparing the area for treatment and furnishing and placing native grass and forb seed in designated areas as specified.

2. Material

Seed— Seed labeling, quality, and seed testing shall be in accordance with Kansas Seed Law. For Kansas Seed Law, the germination test is valid for nine (9) months after the end of the month the test was made so long as the seed remains in Kansas. Federal Seed Law pertains to seed shipped across state lines and the germination test is valid for five (5) months after the end of the month the test was made.

Where named varieties are not available, common (native harvest) seed from a source location as near to the area being seeded as possible may be utilized with prior written request and approval. For mileage restriction, native grass seed will not be used more than 250 to 400 miles north of or 100 to 150 miles south of its point of origin and an increase of elevation of 1500 feet. Seed from a southern source will be given preference over seed from a northern source. Seed source must be identified to the state and county level in order to certify mileage and elevation adequacy.

For seed purchased during the valid period of the germination test, the analysis report may be considered current for the full seeding period in effect at the time of purchase. For example, if seed is purchased March 1 and the germination test date expires March 31, the analysis report may be considered current if the seed is planted by May 15. If the seed is to be planted during a later seeding season, a new germination test shall be performed.

3. Seedbed preparation and treatment

Areas to be treated shall be dressed to a smooth, firm surface. On sites where equipment can operate on slopes safely, the seedbed shall be tilled to a depth of 3 inches, smoothed and firmed up. Soil should be firmed to a degree where a footprint will leave an impression of less than ¼ inch deep. Depending on soil and moisture conditions, disking or cultipacking, or both, may be necessary to properly prepare a seedbed. Where equipment cannot operate safely, the seedbed shall be prepared by hand methods by scarifying to provide a roughened soil surface so that broadcast seed will remain in place.

If seeding is to be accomplished immediately following construction operations, seedbed preparation may not be required except on a compacted, polished, or freshly cut soil surface.

If seeding is to be accomplished in a standing cover crop or dead plant residue, seedbed preparation is not required.

All debris, such as rocks larger than 6 inches in diameter, trash, and other objects that will interfere with seeding or maintenance operations, shall be removed or disposed of as specified in section 6.

4. Seeding and dates of planting

All seeding operations shall be performed in such a manner that the seed is applied in the specified quantities uniformly in the designated areas. The method and rate of seed application and the approved planting dates shall be as specified in section 6.

5. Measurement and payment

For items of work for which specific unit prices are established in the contract, each area treated will be measured as specified in section 6 and the area calculated to the nearest 0.1 acre. Payment for treatment is made at the contract unit price for the designated treatment, which will constitute full compensation for completion of the work.

For items of work for which specific lump sum prices are established in the contract, the quantity of work will not be measured for payment. Payment for this item is made at the contract lump sum price for the item and will constitute full compensation for the completion of the work.

Compensation for any item of work described in the contract, but not listed in the bid schedule is included in the payment for the item of work to which it is made subsidiary. Such items and the item(s) to which they are made subsidiary are identified in section 6.

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6. Items of work and construction details

Items of work to be performed in conformance with this specification and the construction details are:

Bid Item 9 - Range Planting

- a) This item consists of placing seed to the approximate limits shown on the plans or as staked in the field within the approved seeding dates of December 1 and May 15.
- b) All accessible areas shall be sown with a native grass drill containing seedbox agitators. The seed shall be placed 1/4 to 3/4 inch deep. The drill shall be equipped with double disc or coulter furrow openers with depth bands and press wheels spaced not more than 12 inches apart. Small, inaccessible areas or wet areas may be broadcast seeded. Broadcast areas shall be lightly harrowed or raked the same day the seed is spread.
- c) The seed mixture shall be as follows for the designated area. The actual quantity of seed applied will be based on the designed quantity shown on the plans.

<u>Species</u>	<u>Pounds per Acre in "Pure Live Seed" (PLS)</u>
Kaw Big Bluestem	1.5
Aldous Little Bluestem	0.4
Cheyenne Indiangrass	0.9
Blackwell Switchgrass	0.45
El Reno Sideoats Grama	0.9
Lovington Blue Grama	0.2
Reno Germplasm Illinois Bundleflower	0.3
Prairie Gold Maxmillian Sunflower	0.05
Kaneb Purple Prairie Clover	0.09
Upright Coneflower	0.03

- d) The seed mix will be pre-approved by the Contracting Officer's Representative based on seed label. The area to be seeded will not be measured. The estimated quantities are shown on the drawings. Payment will be made at the contract lump sum price for Range Planting. Payment will constitute full compensation for labor, equipment, tools, and all other items necessary and incidental to the completion of the work.

Construction Specification 267—Chemical Weed Control

1. Scope

The work will consist of providing and applying a labeled herbicide to an area of land for weed control as required by the drawings and specifications.

2. Location

The location and application of the herbicide application shall be as specified on the drawings.

3. General Criteria

All pest management methods must comply with federal, state, and local regulations. This includes management plans for invasive species, noxious weeds, and disease vectors. Compliance with the Food Quality Protections Act, Federal Insecticide, Fungicide and Rodenticide Act, Worker Protection Standard and Interim Endangered Species Protection Program is required. All restrictions and requirements listed on the product label will be adhered to. A safety plan for individuals exposed to chemicals will be in place including telephone numbers for emergency treatment centers. Signs will be posted around sites that have been treated as required by the herbicide label. Properly dispose of excess herbicide and herbicide containers. Application equipment shall be calibrated according to KSU Extension and/or manufacturer recommendations. Worn nozzles, cracked hoses or other faulty equipment will be replaced before application.

4. Herbicide Products, Rates, and Application Methods

The selected herbicide(s) shall be labeled for the intended use, rate of application and method of application. The selected herbicide shall be based on the recommendations found in the most recent version of the Kansas State University Extension publication currently entitled 2015 Chemical Weed Control, SRP-1117 or as specified in section 6. Reference is available at the following link: <http://www.ksre.ksu.edu/bookstore/>.

5. Measurement and payment

For items of work for which specific unit prices are established in the contract, each area treated will be identified on an aerial map or design drawing and the area calculated to the nearest 0.1 acre. Payment for treatment is made at the contract unit price for the designated treatment, which will constitute full compensation for completion of the work.

For items of work for which specific lump sum prices are established in the contract, the quantity of work will not be measured for payment. Payment for this item is made at the contract lump sum price for the item and will constitute full compensation for the completion of the work.

Compensation for any item of work described in the contract, but not listed in the bid schedule is included in the payment for the item of work to which it is made subsidiary. Such items and the item(s) to which they are made subsidiary are identified in section 6.

6. Items of work and construction details

Items of work to be performed in conformance with this specification and the construction details are:

Bid Item 10 - Chemical Weed Control

- a) This item of work includes providing the selected herbicides and the application of the selected herbicides according to product label on the whole area shown on the drawings. Application purpose is to stop growth of previous crop and other vegetation prior to establishment of native grass and forb mix.
- b) Application will be by broadcast spray with approved application equipment. The equipment shall be made available for inspection prior to application at the discretion of the inspector.
- c) The use of product names is for informational purposes only and is not an endorsement.
- d) The herbicide shall contain glyphosate and imazapic equivalent to the herbicide product commonly known as Journey as described in the 2015 Chemical Weed Control, SRP-11117. The rate of herbicide application shall be equivalent to or equal to 10.7 ounces per acre of Journey plus an additional ½ lb per acre active ingredient glyphosate. Adjuvants will be added to the herbicide mix as recommended by the product(s) label.
- e) At least 5 - 7 gallons of water per acre will be used as the herbicide carrier.
- f) The herbicide application will be preplant or preemergence of the native grass planting. Air temperature will need to be above 55 degree Fahrenheit for herbicide application. Range planting shall not occur until three weeks after Chemical Weed Control Application.
- g) The area to be sprayed will not be measured. The amount of chemical to be sprayed will be based on the design quantity for Chemical Weed Control. Payment will be made at the contract lump sum price for Chemical Weed Control and will constitute full compensation for labor, equipment, tools, and all other items necessary and incidental to the completion of this item of work.

Construction Specification 271 – Turf Reinforcement Mat

1. Scope

The work shall consist of furnishing, placing, and anchoring turf reinforcement mat on all areas described in Section 6 of this specification.

2. Site preparation

The area to be covered shall be free from rills and gullies and sufficiently smooth to permit placing and anchoring the blankets.

3. Materials

The Turf Reinforcement Mat (TRM) shall be a composite, machine-produced mat with a matrix of coconut fiber, straw, wood fibers, or other natural materials incorporated into a permanent three-dimensional turf reinforcement matting. The matrix shall weigh a minimum of 1.3 lb/yd² and be evenly distributed across the entire width of the matting adjacent to a corrugated intermediate netting weighing at least 24 lbs/1000 ft². The top and bottom netting shall weigh a minimum of 24 lbs/1000 ft². The netting mesh will have a maximum spacing of 0.5 inch and the entire mat shall be sewn together with a permanent polypropylene thread that is stabilized to be 100 percent resistant to decomposition from ultraviolet light. The stitch spacing shall not exceed 1.5 inches on center.

4. Placement of TRM

The mats shall be hand placed after all fertilizer, seed, and other soil amendments have been incorporated into the soil. The mats shall be placed parallel to the direction of the slope and the bottom netting and matrix shall be in direct contact with the soil.

All mats shall be anchored at the top and bottom of the slope in a trench with a minimum depth of 12 inches. Staple the mats to the bottom of the trench. The maximum spacing for staples in the trench shall be 3 feet or as recommended by the manufacturer.

The mats shall be secured to the slope using wire staples. Staples shall be a minimum of 6 inches in length. Staples shall be driven into the soil at right angles to the ground surface. Where mats join, the sides shall be overlapped a minimum of six inches and anchored.

5. Measurement and payment

For items of work for which specific lump sum prices are established in the contract, the quantity of work will not be measured for payment. Payment for this item is made at the contract lump sum price for the item and will constitute full compensation for the completion of the work.

Compensation for any item of work described in the contract, but not listed in the bid schedule is included in the payment for the item of work to which it is made subsidiary. Such items and the item(s) to which they are made subsidiary are identified in section 6.

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6. Items of work and construction details

Items of work to be performed in conformance with this specification and the construction details are:

Bid Item 11 – Turf Reinforcement Mat (TRM)

- a) This item shall consist of furnishing and installing the TRM in the auxiliary spillways as shown on the drawings. After earthfill in the spillway area is checked and approved by the inspector, the seeding operation can commence. The TRM shall be installed within 48 hours after the seeding operation has been completed.
- b) Anchoring trenches along the perimeter shall be checked and approved prior to TRM placement.
- c) TRM shall be Tensar North American Green Rollmax Vmax P550 or preapproved equivalent.
- d) Except for the anchor trenches as detailed on the drawings, the mats shall be installed as recommended by the manufacturer with length of rolls parallel to the flow direction in the spillway.
- e) Anchor staples shall be placed in rows across the mats with a maximum of 20 inches between anchors. Row spacing down the mats shall not exceed 2 feet. A minimum of 3.75 staples per square yard are required.
- f) Mats which end in mid-slope shall be overlapped at least 12 inches with the upslope blanket on top in shingle fashion. Anchor staples shall be placed in the overlap 12 inches apart.
- g) The area of TRM will not be measured. The estimated quantities are shown on the drawings. Payment will be made at the contract lump sum price for Turf Reinforcement Mat established in the bid schedule. Payment will constitute full compensation for all labor, equipment, tools, and all other items necessary and incidental to the completion of the work. Payment for Turf Reinforcement Mat will include the following related subsidiary items:
 - i. Excavation, TRM, Construction Specification 255
 - ii. Earth Backfill, Hand-Compacted, Construction Specification 254



1320 Research Park Drive
Manhattan, Kansas 66502
Jackie McClaskey, Secretary

Phone: (785) 564-6700
Fax: (785) 564-6777
Email: ksag@kda.ks.gov
www.agriculture.ks.gov
Sam Brownback, Governor

December 5, 2016

USDA-NRCS
760 S BROADWAY BLVD
SALINA KS 67401

FILE COPY

RE: Application
File No. 49733

Dear Sir or Madam:

Your application for permit to appropriate water in 29-4S-2W in Republic County, was received and has been assigned the file number noted above.

As a matter of record, the Division of Water Resources has on hand a large number of applications awaiting processing. Therefore to be fair to all concerned, and so that we can process those applications on hand in the order they were received, we intend to concentrate on the backlog of applications until the issue is resolved. Once review of your application has begun, we will contact you, if additional information is required.

In accordance with the provisions of the Kansas Water Appropriation Act, a portion of which is included below, the use of water as proposed prior to approval of the application is unlawful. Once approved, compliance with the terms, conditions and limitations of the permit is necessary. Conservation of the water resources of Kansas is required.

Section 82a-728 of the Kansas Water Appropriation Act, provides (a) except for the appropriation of water for the purpose of domestic use, . . . it shall be unlawful for any person to appropriate or threaten to appropriate water from any source without first applying for and obtaining a permit to appropriate water in accordance with the provisions of the Water Appropriation Act or for any person to violate any condition of a vested right, appropriation right or an approved application for a permit to appropriate water for beneficial use.

(b) (1) The violation of any provision of this section by any person is a class C misdemeanor . . .

A class C misdemeanor is punishable by a fine not to exceed \$500 and/or a term of confinement not to exceed one month in the county jail. Each day that the violation occurs constitutes a separate offense.

If you have any questions, please contact me at (785) 564-6645. If you wish to discuss a specific file, please have the file number ready so that we may help you more efficiently.

Sincerely,

Brent A Turney, P.G.
Change Application Unit Supervisor
Water Appropriation Program

BAT: dlw
pc: STOCKTON Field Office
GMD