

Appendix C

Figure 1: Sample Early Coordination Letter and Distribution List



June 13, 2011

Richard C. Nelson
Field Supervisor
U.S. Fish and Wildlife Service
Ecological Services Field Office
1511 47th Avenue
Moline, IL 61265

RE: EARLY COORDINATION
ENVIRONMENTAL ASSESSMENT
HAMILTON DRAIN WATERSHED STUDY
POLK COUNTY, IOWA

Dear Mr. Nelson:

Snyder & Associates, Inc. has been authorized by Polk County, Iowa to prepare an Environmental Assessment for the Federal Emergency Management Agency (FEMA) in accordance with requirements set forth in the National Environmental Policy Act of 1969. Sections, townships, and ranges for the basin improvements are as follows:

- T79, R24W, Sections 11, 12, 13, 14, 24

The proposed action envisions the ultimate improvement of five basins. An exhibit depicting the proposed basin improvements is enclosed.

To facilitate the preparation of the required NEPA documentation, we appreciate being advised of regulatory requirements and other informational guidance that may be relevant to identifying and evaluating a range of alternatives for consideration. Please return comments by July 14, 2011 to:

Snyder & Associates, Inc.
Attn: Jeff Walters
2727 SW Snyder Blvd.
Ankeny, IA 50023

Should you have any questions or require additional information, please contact me at 515-964-2020.

Sincerely,

SNYDER & ASSOCIATES, INC.

Jeff Walters
Environmental Scientist

Ref: Early Coordination (EC) list

Snyder & Associates, Inc. - 2727 S.W. Snyder Boulevard - Ankeny, IA 50023
www.snyder-associates.com

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B-1

EARLY COORDINATION LIST
Hamilton Drain Watershed

Ms. Kimberly O. Johnson, P.E.
NEPA Reviewer – Environmental Services
Division
U.S. Environmental Protection Agency
901 North 5th Street
Kansas City, Kansas 66101

Mr. Robert F. Stewart
Office of Environmental Policy & Compliance
U.S. Department of Interior
P.O. Box 25007 (D-108)
Denver Federal Center
Denver, Colorado 80225-0007

Mr. Richard C. Nelson
Supervisor, Rock Island Field Office
U.S. Fish & Wildlife Service
United States Department of the Interior
4469 — 48th Avenue Court
Rock Island, IL 61201

Colonel William J. Bayles
U.S. Army Corps of Engineers
Clock Tower Bldg., PO Box 2004
Rock Island, IL 61204-2004

Ms. Donna Jones
U.S. Army Corps of Engineers
Operations Division
Clock Tower Bldg., PO Box 2004
Rock Island, IL 61204-2004

Ms. Dorie Bollman
Rock Island District USACE, Economic and
Environmental Analysis Branch
Clock Tower Building
P.O. Box 2004
Rock Island, IL 61204-2004

Mr. Nick Chevance
Midwest Regional Office
National Park Service
601 Riverside Drive
Omaha, Nebraska 68102

Mr. Leroy Brown
State Conservationist
U.S. Department of Agriculture
Natural Resource Conservation Service
210 Walnut Street
Des Moines, Iowa 50309

Mr. Andrew Boeddeker
HUD Regional Office
Gateway Tower II
400 State Ave.
Kansas City, KS 66101-2406

Mr. James P. Ryan
Supervisory Project Manager
U.S. Department of Housing and Urban
Development
210 Walnut, Room 239
Des Moines, IA 50309-2155

Dr. Lowell Soike, Deputy Director
State Historical Society of Iowa
Department of Cultural Affairs
600 East Locust
Des Moines, Iowa 50319

Ms. Christine Spackman
Iowa Department of Natural Resources
502 E 9th Street
Des Moines, Iowa 50319

Ms. Christine Schwake
Iowa DNR, Water Resources Section
502 East 9th Street
Des Moines, IA 50319

Mr. Kenneth Herring
Conservation and Recreation Division
Iowa Department of Natural Resources
502 E 9th Street
Des Moines, Iowa 50319

To verify 6(f) funds on a property:
Ms. Kathleen Moench
Iowa Department of Natural Resources
502 E 9th Street
Des Moines, Iowa 50319

Mr. Kenneth Tow, Director
Iowa Department of Agriculture and Land
Stewardship
Soil Conservation Division
502 E. 9th St.
Des Moines, IA 50139-003

Figure 2: Conversation Record between Iowa DNR and Snyder & Associates



CONVERSATION RECORD

Spoke With: Joe Griffin Date 06/03/2011 Time 11:00 AM PM
Company: IDNR Phone No. (515) 281-7017
Project Name: Hamilton Drain Watershed Project No. 111.0293
RE: Early Coordination CC: File

VIA

Phone In Person I Placed Call Party Called

Notes:

Mr. griffin called to state that the project would require stormwater construction permits from his department if greater than one acre of land is disturbed during the project.

Signed: _____

2727 SW Snyder Blvd. | Ankeny, IA 50023
p: 515.964.2020 | f: 515.964.7938 | www.snyder-associates.com

Figure 3: NRCS Early Correspondence Response to Snyder & Associates

United States Department of Agriculture


Natural Resources Conservation Service
210 Walnut Street, Room 693
Des Moines, IA 50309-2180

June 7, 2011

Mr. Jeff Walters
Snyder & Associates, Incorporated
2727 SW Snyder Boulevard
Ankeny, Iowa 50023

RE: Hamilton Drain Watershed, Polk County – Environmental Assessment

Dear Mr. Walters:

Thank you for the opportunity to review the above proposed project.

Please take into account if applicable prime farmland losses associated with this undertaking. Document any conversions of prime farmland on Form AD-1006.

For future reference the State Conservationist is Mr. Richard Sims.

If you have any further questions please contact me, at (515) 284-4370.

Sincerely,


John Myers
State Resource Conservationist

Attachment (Form AD-1006)

Helping People Help the Land
An Equal Opportunity Provider and Employer

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request			
Name of Project		Federal Agency Involved			
Proposed Land Use		County and State			
PART II (To be completed by NRCS)		Date Request Received By NRCS		Person Completing Form:	
Does the site contain Prime, Unique, Statewide or Local Important Farmland? (If no, the FPPA does not apply - do not complete additional parts of this form)		YES <input type="checkbox"/>	NO <input type="checkbox"/>	Acres Irrigated	Average Farm Size
Major Crop(s)	Farmable Land In Govt. Jurisdiction Acres: %	Amount of Farmland As Defined in FPPA Acres: %			
Name of Land Evaluation System Used	Name of State or Local Site Assessment System	Date Land Evaluation Returned by NRCS			
PART III (To be completed by Federal Agency)		Alternative Site Rating			
		Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly					
B. Total Acres To Be Converted Indirectly					
C. Total Acres In Site					
PART IV (To be completed by NRCS) Land Evaluation Information					
A. Total Acres Prime And Unique Farmland					
B. Total Acres Statewide Important or Local Important Farmland					
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted					
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value					
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)					
PART VI (To be completed by Federal Agency) Site Assessment Criteria (Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)		Maximum Points	Site A	Site B	Site C
1. Area In Non-urban Use		(15)			
2. Perimeter In Non-urban Use		(10)			
3. Percent Of Site Being Farmed		(20)			
4. Protection Provided By State and Local Government		(20)			
5. Distance From Urban Built-up Area		(15)			
6. Distance To Urban Support Services		(15)			
7. Size Of Present Farm Unit Compared To Average		(10)			
8. Creation Of Non-farmable Farmland		(10)			
9. Availability Of Farm Support Services		(5)			
10. On-Farm Investments		(20)			
11. Effects Of Conversion On Farm Support Services		(10)			
12. Compatibility With Existing Agricultural Use		(10)			
TOTAL SITE ASSESSMENT POINTS		160			
PART VII (To be completed by Federal Agency)					
Relative Value Of Farmland (From Part V)		100			
Total Site Assessment (From Part VI above or local site assessment)		160			
TOTAL POINTS (Total of above 2 lines)		260			
Site Selected:	Date Of Selection	Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input type="checkbox"/>			
Reason For Selection:					
Name of Federal agency representative completing this form:					Date:

(See Instructions on reverse side)

Form AD-1006 (03-02)

Figure 4: Iowa DNR Early Coordination Response Regarding Permitting and Coordination



CHESTER J. CULVER, GOVERNOR
PATTY JUDGE, LT. GOVERNOR

STATE OF IOWA

DEPARTMENT OF NATURAL RESOURCES
PATRICIA L. BODDY, INTERIM DIRECTOR

June 8, 2011

Mr. Jeff Walters
Snyder & Associates, Inc.
2727 S.W. Snyder Boulevard
Ankeny, IA 50023

RE: Hamilton Drain Watershed Study – EA Early Coordination
Sections 11-14 & 24, Township 79 North, Range 24 West, Polk County

Dear Mr. Walters:

This letter is in response to the May 31, 2011 letter concerning the above referenced project. Thank you for inviting our comments on the impact of the above referenced project.

As you are aware, waters of the United States (includes wetlands) should not be disturbed if a less environmentally damaging alternative exists. Unavoidable adverse impacts should be minimized to the extent practicable. Any remaining adverse impacts should be adequately compensated for through restoration, enhancement, creation and/or preservation activities. We would ask that Best Management Practices be used to control erosion and protect water quality near the project.

Due to the potential for impact to the endangered Indiana bat (*Myotis sodalis*), if trees must be cleared for this project, you must contact the U.S. Fish and Wildlife Service at 309-757-5800 for further assistance.

Any proposed placement of dredged or fill material into waters of the United States (including jurisdictional wetlands) requires Department of the Army authorization. When detailed plans are available, please complete and submit the joint application form to the Rock Island District Corps of Engineers (1 copy) and Iowa Department of Natural Resources (2 copies) for processing. The application form may be obtained at <http://www.iowadnr.gov/other/files/jointpermit.pdf>. An electronic copy of the application form and instructions may also be obtained on the Corps' website: <http://www2.mvr.usace.army.mil/Regulatory/default.cfm>.

If you have any questions, please call me at (515) 281-6615.

Sincerely,

A handwritten signature in cursive script that reads "Christine M. Schwake".

Christine Schwake
Environmental Specialist

502 EAST 9th STREET / DES MOINES, IOWA 50319-0034
PHONE 515-281-5918 FAX 515-281-8895 www.iowadnr.gov

B-6

Figure 5: Iowa DNR Early Coordination Response Requesting Botanical Survey



TERRY E. BRANSTAD, GOVERNOR
KIM REYNOLDS, L.T. GOVERNOR

STATE OF IOWA

DEPARTMENT OF NATURAL RESOURCES
ROGER L. LANDE, DIRECTOR

June 28, 2011

Snyder and Associates
Attn: Jeff Walters
2727 S.W. Boulevard
Ankeny, IA 50023

RE: Environmental Review for Natural Resources
Hamilton Drain Watershed Study
Polk County
Section 11-14 and 24, Township 79N, Range 24W

Dear Mr. Walters:

Thank you for inviting Department comment on the impact of this project. There are records of the state-threatened Oval Ladies's-tresses Orchid (*Spiranthes ovalis*) in the immediate vicinity of the proposed project. The Department requires that the results of a botanical survey of any wooded area to be impacted by the project, conducted by a qualified botanist, are submitted in advance of construction. In particular, aerial photographs of areas identified as Basins #1, #4, and #5, in the review request appear to contained wooded habitat. The results of this survey will inform Department recommendations to avoid, minimize, and mitigate impact to this species. Department records and data are not the result of thorough field surveys. If listed species or rare communities are found during the planning or construction phases, additional studies and/or mitigation may be required.

This letter is a record of review for protected species, rare natural communities, state lands and waters in the project area, including review by personnel representing state parks, preserves, recreation areas, fisheries and wildlife but does not include any comment from the Environmental Services Division of this Department. This letter does not constitute a permit. Other permits may be required from the Department or other state or federal agencies before work begins on this project.

Any construction activity that bares the soil of an area greater than or equal to one acre including clearing, grading or excavation may require a storm water discharge permit from the Department. Construction activities may include the temporary or permanent storage of dredge material. For more information regarding this matter, please contact Ruth Rosdail at (515) 281-6782.

The Department administers regulations that pertain to fugitive dust IAW Iowa Administrative Code 567-23.3(2)"c." All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of property during construction, alteration, repairing or demolishing of buildings, bridges or other vertical structures or haul roads. All questions regarding fugitive dust regulations should be directed to Jim McGraw at (515) 242-5167.

502 EAST 9th STREET / DES MOINES, IOWA 50319-0034
PHONE 515-281-5918 FAX 515-281-6794 www.iowadnr.gov

B-7

Figure 6: Army Corps Early Coordination Response to Snyder & Associates



REPLY TO
ATTENTION OF

Planning, Programs, and
Project Management Division

DEPARTMENT OF THE ARMY
ROCK ISLAND DISTRICT CORPS OF ENGINEERS
CLOCK TOWER BUILDING
PO BOX 2004
ROCK ISLAND, ILLINOIS 61204-2004

June 28, 2011

Mr. Jeff Walters
Environmental Scientist
Snyder & Associates, Inc.
2727 S.W. Snyder Boulevard
Ankeny, Iowa 50023

Dear Mr. Walters:

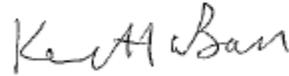
I received your letter dated May 31, 2011, concerning early coordination for an environmental assessment for the Hamilton Drain Watershed Study, Polk County, Iowa. Rock Island District Corps of Engineers staff reviewed the information you provided and have the following comments:

- a. Your proposal does not involve Rock Island District administered land; therefore, no further Rock Island District real estate coordination is necessary.
- b. Any proposed placement of dredged or fill material into waters of the United States (including jurisdictional wetlands) requires Department of the Army authorization under Section 404 of the Clean Water Act. We require additional details of your project before we can make a final determination of permit requirements. When detailed plans are available, please complete and submit an application packet to the Rock Island District for processing.
- c. The Iowa Emergency Management Division should be contacted to determine if the proposed project may impact areas designated as floodway. Mr. John Wagman is the Iowa State Hazard Mitigation Team Leader. His address is: 7105 NW 70th Avenue, Camp Dodge-Building W4, Johnston, Iowa 50131. You can reach him by calling 515/725-3231.

No other concerns surfaced during our review. Thank you for the opportunity to comment on your proposal. If you need more information, please call Mr. Randy Kraciun of our Environmental and Economic Branch, telephone 309/794-5174.

You may find additional information about the Corps' Rock Island District on our website at <http://www.mvr.usace.army.mil> . To find out about other Districts within the Corps, you may visit: <http://www.usace.army.mil/about/Pages/Locations.aspx>.

Sincerely,



Kenneth A. Barr
Chief, Environmental and
Economic Branch

Figure 7: FEMA EHP Request for Consideration of Alternatives to Wetland Impacts

U.S. Department of Homeland Security
Federal Emergency Management Agency
Iowa Closeout Center
FEMA-1763-DR-IA
7755 Office Plaza Drive North
Suite 145, Building G
West Des Moines, Iowa 50266
Phone: (515) 244-5601



FEMA

August 21, 2012

MEMORANDUM FOR: Casey Hartline
FEMA Region VII Hazard Mitigation Grant Program

FROM: John Dawson, Environmental Protection Specialist
FEMA ICC, Environmental Planning and Historic Preservation Branch (EHP)

SUBJECT: Request for documentation of alternatives considered regarding wetlands located at the proposed Basin 1 and proposed Basin 3 for the Hamilton Drain Watershed Basin and Stormwater Improvements project - HMGP 0113

FEMA EHP has received the February 2012 Draft Environmental Assessment (EA) and the July 2012 Draft Supplemental EA for the May 2012 scope of work including a revised proposed location for Basin 3.

As identified in National Wetland Inventory maps, Basin 1 encompasses a mixed freshwater wetland system amounting to 7.86 acres and Basin 3 encompasses a forested freshwater wetland amounting to 0.31 acres. Neither document adequately addresses the practicability of avoiding or minimizing impacts to wetlands per Executive Order (EO) 11990 Protection of Wetlands. This EO, as detailed in Chapter 44 Code of Federal Regulations Parts 9.2 and 9.9, require FEMA to avoid, minimize, or mitigate impacts to wetlands for projects that FEMA is considering funding, in that order.

Documentation received to date indicates that the Applicant intends to mitigate the loss of wetlands, however prior to mitigation, options for avoiding or minimizing impacts must be either clearly eliminated or identified and evaluated in the EA.

Please request documentation from the Applicant demonstrating the processes used for considering and eliminating alternatives for this project pertaining to wetland impacts. FEMA EHP will need this information or fully developed alternatives avoiding or minimizing impacts to wetlands to proceed with the environmental review process. FEMA EHP will incorporate this requested information into the EA drafts previously received prior to posting the document for public comment.

If you have any questions or concerns, please contact me at john.dawson@fema.dhs.gov or 540-270-5780.

Figure 8: Snyder & Associates Wetland Alternatives Considered Response to FEMA



September 6, 2012

John Dawson, Environmental Protection Specialist
FEMA, Iowa Closeout Center
7755 Office Plaza Drive North
West Des Moines, IA 50266

RE: HAMILTON DRAIN WATERSHED FLOOD CONTROL IMPROVEMENTS
DOCUMENTATION OF ALTERNATIVES CONSIDERED

Dear Mr. Dawson:

This letter is in response to your request, dated August 21, 2012, for additional documentation of alternatives considered for avoiding or minimizing impacts to existing wetlands at locations of proposed detention basins within the Hamilton Drain Watershed for Basins 1 and 3.

A wetland delineation, using the 1987 Corps of Engineers Wetland Delineation Manual and the 2010 Midwest Supplement, has not been completed on any of the proposed basins. This is due to the structure of the schedule provided by FEMA where the Environmental Assessment was to be performed in the first phase and the wetland delineation was to be performed in the second phase. The approximate wetland areas within the EA document are based on aerial photography and a windshield survey of the proposed basins. Impacts to any wetlands cannot be adequately defined until a wetland delineation is completed to determine the upper boundaries of the wetlands.

The potential wetland at proposed Basin 1 likely consists of a mixture of emergent and scrub-shrub wetlands and some deepwater habitat. Preliminary review indicates that approximately 7.9 acres of potential wetland may be impacted at the location of Basin 1. Some level of wetland impact at this site is unavoidable. As currently proposed, the longitudinal slope of the basin has already been flattened to nearly 0.50%, which will require special design consideration to convey drainage. Alternate locations for Basin 1 between the proposed location and Basins 2/2A were considered; however a majority of this area has been previously developed and construction of a detention basin, if hydraulically feasible, would require acquisition and relocation of several residences. For these reasons, Basin 1 is being located as proposed in the April 25, 2012 Final Report.

During the preliminary design, an attempt was made to shift Basin 1 as far north as possible to limit the area of wetlands impacted. Unfortunately, the elevations of existing drainage structures, specifically the existing box culvert under Interstate Highway 35/80, prevent the basin

2727 SW Snyder Boulevard | P.O. Box 1159 | Ankeny, IA 50023-0974

p: 515.964.2020 | f: 515.964.7938 | www.snyder-associates.com

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from being shifted farther north. Attempts will be made to further reduce the impacts to the proposed wetland during final design.

The area encompassing Basin 1 is critical for controlling downstream flooding. Currently, drainage from the area upstream of proposed Basin 1 flows uncontrolled in a ditch along the east side of NE 3rd Street (north of I-35/80). This flow regularly overtops NE 3rd Street and causes flooding of NE 5th Street and NE 50th Avenue as well. Routing flows into Basin 1 will provide discharge control to protect these areas from flooding. In addition to reducing flooding within the immediate area, Basin 1 will provide control of discharge to Drainage Ditch 51 (DD51) (south of the Interstate – between NE 46th Pl. & NE 48th Pl.). Uncontrolled flows in DD51 currently cause flooding on NE 3rd Street (south of I-35-80), NW 2nd Avenue, and NW 6th Drive.

Construction of a basin within the proposed wetland will greatly improve flood control downstream. Due to the design of Basin 1, wetlands will still be present within the area; however, there will be some loss of function, therefore, mitigation in the form of creation or purchase of wetland bank credits are proposed.

Basin 3 was originally proposed to be constructed north of NE 54th Avenue, approximately ½ mile east of NE 14th Street, and immediately east of the existing Union Pacific Railroad tracks. Basin 3 has been relocated to a new site situated south of Interstate Highway 35/80. Based on aerial photography and a windshield survey, there is potential 0.55 acres of wetlands at this site. The current proposed location for Basin 3 is south of Interstate Highway 35/80. This location was selected, in part, to minimize wetland impacts described above. The site currently proposed for Basin 3 includes potential for 1.2 acres of wetland impact, though most of this area can likely be left undisturbed during final design. In addition, the alternative site provides more effective flood control than the previous site.

For all sites, once wetland delineation and topographic survey is completed during Phase 2 of the project, a more detailed design can be completed, and further attempts to minimize wetland impacts will be undertaken. The following table summarizes both the potential impacts and the anticipated impacts after final design at each basin site. Any remaining wetland areas impacted after final design will be mitigated as required.

	Basin No.						
	1	2	2A	3	3 (relocated)	4	5
Potential Wetland Impacts	7.9	0.58	0.28	0.55	1.2	2.85	2.58
Alternative Carried Forward	Yes	Yes	Yes	No	Yes	No	No
Estimated Impact After Final Design.	6.0	0.3	0.28	N/A	0.1	N/A	N/A

John Dawson
FEMA
September 10, 2012
Page 3 of 3

If you have any further questions regarding this explanation of alternatives, please feel free to contact me.

Sincerely,

SNYDER & ASSOCIATES, INC.

A handwritten signature in blue ink that reads "Mark A. Land". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Mark A. Land, P.E., CFM
Project Director

MAL/sak

cc: Robert Rice, Polk County

Figure 9: Wetlands Executive Order 11990 8-Step Documentation

**E.O. 11990 Eight-Step Review
Hamilton Drain Watershed Flood Control Improvements
Hazard Mitigation Grant Program Project #0113
FEMA 1763-DR-IA**

<p>Step 1: Determine whether the Proposed Action is located in a 100-year floodplain and/or wetland (500-year floodplain for Critical Actions) and whether it has the potential to affect or be affected by a floodplain/wetland</p>	<p>Project Analysis: According to the Flood Insurance Rate Map 1909010115D, effective 07/19/2000, the proposed project is located outside of the floodplain.</p> <p>Review of the National Wetlands Inventory Map indicates the proposed project will significantly impact two mapped freshwater wetland systems and a possible third emergent wetland system.</p>
<p>Step 2: Notify public at earliest possible time of the intent to carry out action in a floodplain or wetland, and involve the affected and interested public in the decision-making process.</p>	<p>Project Analysis: Disaster-wide initial public notice was completed on July 16-18, 2008 and August 6, 2008, which addressed program actions that may impact floodplains and/or wetlands. This has constituted the early public notice requirement.</p>
<p>Step 3: Identify and evaluate practicable alternatives to locating the Proposed Action in a floodplain or wetland.</p>	<p>Project Analysis: The applicant considered several options including the following alternatives in selecting the proposed action:</p> <p>No Action Alternative: Under the No Action Alternative, FEMA would not fund the construction of flood control mitigation measures within the Hamilton Drain Watershed in Polk County, IA. Continued flooding and flash flooding of roads, erosion, and inundation of septic systems for 25 and 50-year storms as well as flood damage to homes and businesses.</p> <p>Alternative #1: Under Alternative 1, FEMA funding would be provided for the construction of three detention basin systems; Basin 1 would encompass a freshwater palustrine and emergent system mapped by the NWI at approximately 7.8 acres. The proposed basin would be graded toward the southeast at the intersection of NE 49th Place and NE 3rd Street with an open channel and twin 48-inch reinforced concrete pipe system collecting and conveying stormwater from the northeast corner of NE 52nd Avenue and NE 3rd Street. The proposed basin would drain into 36-inch reinforced concrete pipe, replacing an existing 36-inch corrugated metal pipe.</p> <p>The proposed Basin 2/2A tandem system would be located on the Saydel High School property; Basin 2A would be located on the east side of the school on property or easements to be acquired as part of the project. This basin would collect and detain stormwater draining from the school and surrounding properties before draining through a proposed 36-inch culvert and outlet control structure into an existing creek. This creek drains along the east and southeast side of the school and</p>

Prepared By: John Dawson, Environmental Protection Specialist

E.O. 11990 Eight-Step Review
Hamilton Drain Watershed Flood Control Improvements
Hazard Mitigation Grant Program Project #0113
FEMA 1763-DR-IA

	<p>adjoining private properties into the proposed Basin 2 to be located along NE 54th Avenue. Basin 2 potentially encompasses an emergent freshwater wetland and would be graded toward the west to drain into a 48-inch reinforced concrete pipe replacing an existing 48-inch corrugated metal pipe discharging south of a commercial property at the south intersection of NE 7th Street and NE 54th Avenue.</p> <p>The proposed Basin 3 would be located on a farmed parcel to be acquired or easements purchased with an NWI mapped wetland of approximately one-third of an acre in the southwest corner. The southwest corner of the basin would be located at the intersection a private drive extending north from the intersection of NE 7th Street and NE 47th Place and Walfley Creek/Drainage Ditch #51, south of Interstate 80/35. The proposed basin would be graded toward this corner with the existing berm between the property and Walfley Creek would be graded to the basin level to allow stormwater detention from the creek. A proposed multi-staged outlet control structure would be constructed to replace the existing culvert at the access road and drain back into Walfley Creek west of the existing access road.</p> <p>A proposed improved storm sewer and open channel system would be located along NE 7th Street. The proposed 48-inch reinforced concrete pipe would connect from the low-lying area between residential properties on the intersection of NE 7th Street and NE 51st Avenue and NE 6th Court. The proposed storm sewer would run parallel to NE 7th Street and would discharge into the expanded open channel south of NE 50th Avenue and draining into an existing culvert under Interstate 80/35.</p> <p>Dismissed Alternatives: In accordance with 44 CFR, Part 9.9, other alternatives were considered and dismissed as not practicable. These dismissed alternatives are discussed in section 3.3 of the Environmental Assessment.</p> <p>Proposed Action Alternative: Under Alternative 1, FEMA funding would be provided for the construction of three detention basin systems; Basin 1 would encompass a freshwater palustrine and emergent system mapped by the NWI at approximately 7.8 acres. The proposed basin would be graded toward the southeast at the intersection of NE 49th Place and NE 3rd Street with an open channel and twin 48-inch reinforced concrete pipe system collecting and conveying stormwater from the northeast corner of NE 52nd</p>
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Prepared By: John Dawson, Environmental Protection Specialist

E.O. 11990 Eight-Step Review
Hamilton Drain Watershed Flood Control Improvements
Hazard Mitigation Grant Program Project #0113
FEMA 1763-DR-IA

	<p>Avenue and NE 3rd Street. The proposed basin would drain into 36-inch reinforced concrete pipe, replacing an existing 36-inch corrugated metal pipe.</p> <p>The proposed Basin 2/2A tandem system would be located on the Saydel High School property; Basin 2A would be located on the east side of the school on property or easements to be acquired as part of the project. This basin would collect and detain stormwater draining from the school and surrounding properties before draining through a proposed 36-inch culvert and outlet control structure into an existing creek. This creek drains along the east and southeast side of the school and adjoining private properties into the proposed Basin 2 to be located along NE 54th Avenue. Basin 2 potentially encompasses an emergent freshwater wetland and would be graded toward the west to drain into a 48-inch reinforced concrete pipe replacing an existing 48-inch corrugated metal pipe discharging south of a commercial property at the south intersection of NE 7th Street and NE 54th Avenue.</p> <p>The proposed Basin 3 would be located on a farmed parcel to be acquired or easements purchased with an NWI mapped wetland of approximately one-third of an acre in the southwest corner. The southwest corner of the basin would be located at the intersection a private drive extending north from the intersection of NE 7th Street and NE 47th Place and Walfley Creek/Drainage Ditch #51, south of Interstate 80/35. The proposed basin would be graded toward this corner with the existing berm between the property and Walfley Creek would be graded to the basin level to allow stormwater detention from the creek. A proposed multi-staged outlet control structure would be constructed to replace the existing culvert at the access road and drain back into Walfley Creek west of the existing access road.</p> <p>A proposed improved storm sewer and open channel system would be located along NE 7th Street. The proposed 48-inch reinforced concrete pipe would connect from the low-lying area between residential properties on the intersection of NE 7th Street and NE 51st Avenue and NE 6th Court. The proposed storm sewer would run parallel to NE 7th Street and would discharge into the expanded open channel south of NE 50th Avenue and draining into an existing culvert under Interstate 80/35.</p>
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Prepared By: John Dawson, Environmental Protection Specialist

**E.O. 11990 Eight-Step Review
Hamilton Drain Watershed Flood Control Improvements
Hazard Mitigation Grant Program Project #0113
FEMA 1763-DR-IA**

<p>Step 4: Identify the full range of potential direct or indirect impacts associated with the occupancy or modification of floodplains and wetlands, and the potential direct and indirect support of floodplain and wetland development that could result from the Proposed Action.</p>	<p>Project Analysis: The proposed project is expected to reduce flooding from 25 and 50-year storm events and with the capacity to store 100-year storm events by detaining and slowing the release of stormwater within the Hamilton Drain Watershed. Future development within the watershed is likely to impact the hydraulics and hydrology of the watershed which may indirectly affect the effectiveness of the proposed project. The locations of the proposed basins are not expected to directly affect future development; there may be indirect support of upstream development, however none of the areas are located in the 100 or 500-year floodplains as mapped by FEMA.</p> <p>The proposed Basins 1 and 3 will directly impact known wetlands through grading, removal of existing vegetation, and alterations to the inflow of stormwater. Changes to inflow and outflow points will also change the hydraulics and hydrology of the wetlands and would change the biological and chemical functions even without grading or vegetation removal. Indirectly, without design modifications, wetlands may re-emerge in the locations of the proposed basins. The proposed project is not expected to support or encourage development within wetlands or floodplains beyond the project itself.</p>
<p>Step 5: Minimize the potential adverse impacts from work within floodplains and wetlands (identified under Step 4), restore and preserve the natural and beneficial values served by wetlands.</p>	<p>Project Analysis: Direct impacts to wetlands have been reduced by eliminating two basin locations and changing the proposed location of Basin 3 originally considered; these locations would have impacted a greater number of acres of wetlands. Additional attempts to minimize impacts are recommended as practicable in the final design such as incorporating enhanced detention basin features, native prairie and wetland species, and retention of existing vegetation if possible. Permitting and coordination with the Iowa Department of Natural Resources (IDNR) and U.S. Army Corps of Engineers (ACOE) is required. Complete delineation of the known wetlands and a suspected wetland at Basin 2 are required to determine commensurate wetland mitigation levels; wetland mitigation must be coordinated with the IDNR and ACOE as appropriate.</p>
<p>Step 6: Reevaluate the Proposed Action to determine: 1) if it is still practicable in light of its exposure to flood hazards; 2) the extent to which it will aggravate the hazards to others; 3) its potential to disrupt floodplain and wetland values.</p>	<p>Project Analysis: The proposed project is designed to reduce flooding hazards to adjacent and downstream property owners and is not expected to aggravate known hazards to others. While wetlands will be directly impacted and will require mitigation, alternatives to the components impacting wetlands have been determined to not be practicable and are further detailed in the FEMA Environmental Assessment for this project.</p>

Prepared By: John Dawson, Environmental Protection Specialist

**E.O. 11990 Eight-Step Review
Hamilton Drain Watershed Flood Control Improvements
Hazard Mitigation Grant Program Project #0113
FEMA 1763-DR-IA**

<p>Step 7: If the agency decides to take an action in a floodplain or wetland, prepare and provide the public with a finding and explanation of any final decision that the floodplain or wetland is the only practicable alternative. The explanation should include any relevant factors considered in the decision-making process.</p>	<p>Project Analysis: Per 44 CFR, Part 9.12, disaster-wide initial public notice was published state wide July 16-18, August 6, and October 5-8, 2008. A cumulative Final Notice was placed October 5 – 8, 2008 in the Des Moines Register, in the Cedar Rapids Gazette serving Linn County and Johnson County, and the Mason City Globe Gazette. A public notice was published locally in the Des Moines Register announcing the availability of the Environmental Assessment and this 8-Step document for public consideration and comment.</p>
<p>Step 8: Review the implementation and post implementation phases of the Proposed Action to ensure that the requirements of the EOs are fully implemented. Oversight responsibility shall be integrated into existing processes.</p>	<p>Project Analysis: This step is integrated into the NEPA process and FEMA project management and oversight functions. This document is included in the Environmental Assessment developed to evaluate the impacts of the proposed project and its alternatives.</p>

Prepared By: John Dawson, Environmental Protection Specialist

Figure 10: Section 106 Consultation Letter with SHPO Concurrence Dated 11/09/2011

RAC 11177030

NOV 07 2011

U.S. Department of Homeland Security
Federal Emergency Management Agency
Iowa Closeout Center
FEMA-1763-DR-IA
7755 Office Plaza Drive North
Suite 145, Building G
West Des Moines, Iowa 50266
Phone: (515) 244-5601



FEMA

November 7, 2011

Douglas Jones
Review and Compliance Program Manager
State Historical Society of Iowa
600 East Locust Street
Des Moines, IA 50319-0290

Re: FEMA-1763-DR-IA, Hazard Mitigation Grant Program (HMGP) #0113, Watershed Development Project, Hamilton Drain Watershed, Polk County, Iowa: Results of Phase I Cultural Resources Investigation & Finding of No Historic Properties Affected

FEMA HMGP program submission – standard project review for non-emergency undertakings (30-day review):

Dear Mr. Jones:

The Federal Emergency Management Agency (FEMA) proposes to administer Federal disaster assistance pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act, P.L. 93-288, as amended. The purpose of the Hazard Mitigation Grant Program is to implement long-term mitigation measures to reduce loss of life and property damage resulting from natural disasters. FEMA has received a funding request from Polk County (sub-applicant) to upgrade the Hamilton Drain Watershed, by installing five new detention basins and storm sewer alignment. The proposed projects are eligible mitigation measures implemented during the recovery of the federally declared disaster DR-1763-IA.

FEMA is initiating a Section 106 review for the above referenced project in accordance with Title 36 Code of Federal Regulations Part 800 and the *Programmatic Agreement among the Federal Emergency Management Agency of the Department of Homeland Security, the State Historic Preservation Office of Iowa, the Iowa Homeland Security and Emergency Management Division and the Advisory Council on Historic Preservation*.

The proposed mitigation project consists of excavating and shaping five (5) detention basins in central Polk County, located within and north of the northeast corner of the City of Des Moines. The five basins are located in areas of existing natural run-off and will be increased to hold storm water during high water flow events to reduce damages to area infrastructure. In addition, two segments of storm sewer will be aligned to better facilitate use of the detention basins.

FEMA has determined that the area of potential effects (APE) for this undertaking is limited to the locations within Polk County identified for the five detention basins, and the storm sewer alignment project, associated with the scope of work (see attached map and report).

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Due to the extensive ground disturbance associated with this undertaking, FEMA in consultation with your office required the sub-applicant to obtain a Phase I Archeological Survey of the project area. In June of 2011, representatives from Consulting Archaeological Services conducted a *Phase I Cultural Resources Investigation for the Proposed Watershed Development Project for Hamilton Drain Watershed, Polk County, Iowa*, the findings of which are detailed in the attached report.

FEMA has evaluated the potential for the presence of cultural resources and significant archaeological deposits at the proposed site. FEMA has reviewed the methodology and findings recommended in the attached report. FEMA concurs with the statement of the report, that "no standing structures will be impacted by the proposed watershed development activities." FEMA further concurs that as no archaeological resources were identified during the investigation, no archaeological properties will be affected by the undertaking.

Based on the results of this archaeological survey, and in accordance with the *Programmatic Agreement among the Federal Emergency Management Agency of the Department of Homeland Security, the State Historic Preservation Office of Iowa, the Iowa Homeland Security and Emergency Management Division and the Advisory Council on Historic Preservation*, FEMA finds that the undertaking will result in no historic properties affected.

FEMA respectfully requests your concurrence with this finding within the 30-day agreed upon timeframe. If you have any questions or comments, please contact Ann Schmid, Historic Preservation Specialist at (540) 270-0970 or by email at ann.schmid@DHS.gov.

Sincerely:



Eric Wieland
EHP Branch Director
FEMA - ICC

EW/AHS

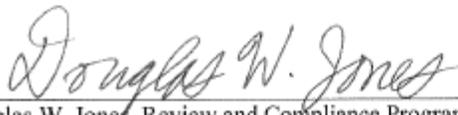
Enclosures: Phase I Archaeological Survey
Figures



I concur with the methodology and findings of the attached report prepared by Consulting Archaeological Services (2011). I further concur that no historic properties will be affected as a result of the proposed action pursuant to 36 CFR Part 800.



I do not concur with your findings for the following reason:



Date

11/9/2011

Douglas W. Jones, Review and Compliance Program Manager/Archaeologist

Polk County Hamilton Drain Watershed – HMGP 0113 | 2

Figure 11: Section 106 Consultation Letter with SHPO Concurrence Dated 10/23/2012

OCT 12 2012

R&C 111177030
U.S. Department of Homeland Security
Federal Emergency Management Agency
FEMA-1763-DR-IA
C/O Iowa Recovery Bureau
Iowa Homeland Security and Emergency
Management Division
7900 Hickman Road, Suite 500
Windsor Heights, Iowa 50324



October 11, 2012

Douglas Jones
Review and Compliance Program Manager
State Historical Society of Iowa
600 East Locust Street
Des Moines, IA 50319-0290

Re: FEMA-1763-DR-IA, R&C 111177030, Hazard Mitigation Grant Program (HMGP) #0113, Watershed Development Project, Hamilton Drain Watershed, Polk County, Iowa: Results of Phase I Cultural Resources Investigation & Finding of No Historic Properties Affected

FEMA HMGP program submission – continuing consultation - standard project review for non-emergency undertakings (30-day review):

Dear Mr. Jones:

The Federal Emergency Management Agency (FEMA) proposes to administer Federal disaster assistance pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act, P.L. 93-288, as amended. The purpose of the Hazard Mitigation Grant Program is to implement long-term mitigation measures to reduce loss of life and property damage resulting from natural disasters. FEMA has received a funding request from Polk County (sub-applicant) to upgrade the Hamilton Drain Watershed, by installing new detention basins and storm sewer alignment. The proposed projects are eligible mitigation measures implemented during the recovery of the federally declared disaster DR-1763-IA.

FEMA is continuing Section 106 review for the above referenced project in accordance with Title 36 Code of Federal Regulations Part 800 and the *Programmatic Agreement among the Federal Emergency Management Agency of the Department of Homeland Security, the State Historic Preservation Office of Iowa, the Iowa Homeland Security and Emergency Management Division and the Advisory Council on Historic Preservation*.

In November 2011, FEMA initiated consultation with your office regarding this undertaking. At that time, the undertaking consisted of the development of five (5) detention basins and two (2) storm sewer alignments. A Phase I Cultural Resource Investigation was conducted for the Area of Potential Effects (APE) for the proposed undertaking by Consulting Archaeological Services (CAS) of Creston, IA. No cultural resources were identified, and your office concurred with FEMA's finding of No Historic Properties Affected.

Since that time, a detailed Benefit Cost Analysis was conducted, which resulted in significant changes to the proposed project. The applicant (Polk County), working with their engineer provided revised plans developed to have a greater benefit-cost ratio. This new design, includes removing two (2) of the

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detention basins (Basin 4 and Basin 5), relocating Basin 3 to a new site and adding a supplemental Basin 2A adjacent to, the previously reviewed Basin 2 (see attached Map of the revised proposed watershed improvements). Basin 1, Basin 2 and the two sewer alignments have not changed since the initial consultation and the previous Phase I Cultural Resources survey found that no historic properties would be affected by those components of the undertaking. As Basin 2A and the new Basin 3 were not previously surveyed, CAS provided supplemental Phase I Cultural Resources Surveys for each of these basins. The supplemental report for Basin 2A consisted of a 3.0 acre survey area slightly north east of Basin 2. The survey did not result in the identification of any cultural resources within Basin 2A. The supplemental report for Basin 3 consisted of a 9.41 acre survey area south of interstate I-35/80 east of NE 7th Street. The initial survey for Basin 3 also resulted in no cultural resources identified.

In preparation for the development of an Environmental Assessment in compliance with the National Environmental Policy Act (NEPA), FEMA EHP staff conducted a site visit to photograph the APE, including all 3 proposed basin sites. At Basin 3, a foundation was documented in the southwest corner of Basin 3. FEMA contacted CAS and spoke with them regarding the foundation, which had not been noted in the supplemental Phase I Cultural Resources Investigation for Basin 3. FEMA provided photographs to CAS, and as a result, CAS conducted a second site visit to Basin 3 and prepared an Addendum to the Supplementary Phase I investigation. The foundation remnant was identified as being of sufficient age to be considered an archaeological site, and therefore was assigned as archaeological site 13PK984. FEMA has reviewed both supplemental investigations and the subsequent addendum and concurs with the methodology and recommendations of the surveys. FEMA further concurs with CAS's recommendation that site 13OK984 is not eligible for listing in the National Register of Historic Places (NRHP).

Based on the results of these additional archaeological surveys, and in accordance with the *Programmatic Agreement among the Federal Emergency Management Agency of the Department of Homeland Security, the State Historic Preservation Office of Iowa, the Iowa Homeland Security and Emergency Management Division and the Advisory Council on Historic Preservation*, FEMA finds that the undertaking will result in no historic properties affected.

FEMA respectfully requests your concurrence with this finding within the 30-day agreed upon timeframe. If you have any questions or comments, please contact Ann Schmid, Historic Preservation Specialist at (540) 270-0970 or by email at ann.schmid@DHS.gov.

Sincerely:



Eric Wieland
EHP Branch Director
FEMA - ICC

EW/AHS

Enclosures:

Supplementary Phase I Cultural Resource Investigation for Proposed Watershed Development Project, Hamilton Drain Watershed, Polk County, Iowa. Cultural Archaeological Services, Report CAS-947, Sellers and Ambrosino, 2012.

Supplementary Phase I Cultural Resource Investigation for a Proposed Watershed Development Project, Basin 3 Location, Hamilton Drain Watershed, Polk County, Iowa. Cultural Archaeological Services, Report CAS-957, Sellers and Ambrosino, 2012.

Addendum to Consulting Archaeological Services Report 957: Supplementary Phase I Cultural Resource Investigation for a Proposed Watershed Development Project, Basin 3 Location, Hamilton Drain Watershed, Polk County, Iowa. Cultural Archaeological Services, Sellers and Ambrosino, 2012.



I concur with the methodology and findings of the attached reports prepared by Consulting Archaeological Services (2012). I further concur that archaeological site 13PK984 is not eligible for listing in the National Register of Historic Places. I further concur, in accordance with the *Programmatic Agreement among the Federal Emergency Management Agency of the Department of Homeland Security, the State Historic Preservation Office of Iowa, the Iowa Homeland Security and Emergency Management Division and the Advisory Council on Historic Preservation*, that no historic properties will be affected as a result of the proposed action pursuant to 36 CFR Part 800.



I do not concur with your findings for the following reason:

Douglas W. Jones

Date

10/23/2012

Douglas W. Jones, Review and Compliance Program Manager/Archaeologist