CITY OF IOWA CITY

MEMORANDUM

DATE: January 15, 2014

TO: Tom Markus, City Manager

FROM: Rick Fosse, Public Works Director

RE: **Iowa City Gateway Project**

Introduction

The City of Iowa City has received notification from the Iowa Department of Transportation that the Federal Highway Administration (FHWA) has approved and signed the Finding of No Significant Impact (FONSI) for the Iowa City Gateway Project. The approval was dated December 18, 2013. The FONSI is the final step in the National Environmental Policy Act (NEPA) process. The project is now cleared to move forward to the design phase.

History/Background

The first phase of the project, the National Environmental Policy Act (NEPA) Process, was started three years ago and is required to receive federal funds for the project. The Environmental Assessment (EA) is a complete study and discussion of resources present within the proposed area, looking at both the natural and social (man-made) environment. Considerable evaluation of options for the Gateway Project occurred as part of this process including the examination of many initial alternatives (off-alignment improvements to other roadways such as Dodge / Governor and Foster Road / Prairie du Chien for example), before concluding that improving the roadway in its current location should be the Preferred Alternative. In addition, the Do Nothing Option continues to be evaluated for comparison. It is important to note that because of aging infrastructure and existing conditions, the Do Nothing Option would still require significant improvements throughout the corridor even if the roadway and bridge were not elevated.

As part of this process, staff has held two public meetings (March 3, 2011 and July 13, 2011), a drop-in center / open house (December 8, 2011), a public hearing (April 4, 2013) and attended three Historic Preservation Committee meetings. The 3 public meetings in 2011 hosted over 330 attendees. Additional comments were received throughout the entire process by staff through email, phone calls and meetings on site or in the office with interested citizens / residents and numerous speaking events with local organizations. The comments and feedback received from the public provided staff and design team with comments and ideas that were used to develop the preferred alternative. If you have not done so already, please take time to view the video or read the transcript of the April 4, 2013 Public Hearing. Both are available on the attached links to project related documents.

Discussion of Solution

The EA completed for this project evaluated the elevation of Dubuque Street to 1' above the 500 year flood event and the low steel of the bridge to 1' above the 500 year flood event. This represents the maximum level of protection that can be built with the existing environmental clearance. The financial grants for this project set a minimum level of protection for Dubuque Street and the low steel of the bridge at 1' above the 100 year flood event. These establish the upper and lower limits of protection that can be considered for design if federal funds are to be used. The details of this project and various design options have been discussed at the September 17, 2013 and October 1, 2013 City Council Work Sessions. The attached spreadsheet, Bridge Type and Level of Protection Comparison, summarizes and compares 48 different options. Also attached are responses to questions that were asked at the October 1st Work Session.

Financial Impact

The preliminary project estimate for the budget was based on a deck girder bridge. A through arch bridge will be approximately $3M more expensive and a cable stay bridge will be approximately $8M more expensive.

Recommendation

The project is currently placed on the agenda for the January 21st informal Work Session. At that time, we will have a brief project presentation and answer questions that the City Council may have. The project is also on the agenda for the Formal City Council meeting for a resolution to establish the three primary design parameters. Those parameters are:

1. Level of protection for Dubuque Street
2. Backwater reduction goals (Elevation of Park Road Bridge)
3. Structural type of the bridge

Staff's recommendations for each of the major design parameters, as outlined at the October 1st Work Session, are described in more detail below:

Level of Protection for Dubuque Street

Staff recommends protecting Dubuque Street to the 2008 + 1' level. While this recommendation offers less protection than the option outlined in the Environmental Assessment (EA), staff feels that this is a reasonable level of protection and provides a good balance of performance while limiting impacts.

Level of Protection Option	Estimated number of days closed over the past 20 years due to Iowa River flooding	Relative Comparison: inches above/below the 2008 + 1' protection level
Existing	150	NA
100 year + 1'	7*	-39"
200 year + 1'	5*	-11"
2008 flood + 1'(Recommended)	0	0"
500 year + 1' (EA Preferred Alt)	0	+19"

*Including one day for cleanup, inspection and repair after inundation

Backwater Reduction Goals and Bridge Type

Staff recommends that we proceed with either the Through Arch Bridge with a low steel elevation of 200yr + 1' or the Deck Girder Bridge with a low steel elevation of 200yr + 1'. As illustrated in the following table, the bridge type has an effect on the backwater reduction, the cost and the elevation of the Dubuque Street / Park Road intersection. All of these factors will need to be weighed and consideration of aesthetics given when making a decision.

Option	Bridge Type	Low Steel Elevation	Elevation at the Dubuque St/Park Rd Intersection	Backwater Reduction at Idyllwild and Taft Speedway	Dubuque Street Protection Level	Construction Cost Estimate of Bridge and Road
Maximum Protection and Backwater Reduction (EA Preferred Alternative)	Deck Girder	500yr + 1'	665.03	7"	500yr + 1'	$36.65 M
Recommended Arch	Through Arch	200yr + 1'	659.02	4.9"	2008 + 1'	$38.31 M
Recommended Girder	Deck Girder	200yr + 1'	662.52	6.1"	2008 + 1'	$35.01 M

A resolution to establish the above design criteria will be on the agenda for the Formal City Council meeting. Please be prepared to provide additional comments or questions at the Work Session for staff to address. Staff requests that the focus remain on the three design criteria that need to be established. As noted in the attached schedule, we will return to discuss specific Roadway Design Elements (lane width, turning lanes, sidewalks and trails) with Council in March. This will give our design team a chance to refine our conceptual design based on the design criteria and allow us to better address the questions that have been raised.

The following materials have been included for Council's review prior to the meeting:

- Questions and Comments generated from the October 1, 2013 Council Work Session, including
    - Roadway Elevations at Key Locations Matrix
    - Schedule of Design Phase Activities
    - Iowa DOT Concept Statement Form
- Updated Links to project-related documents
- Bridge Type and Level of Protection Comparison

Questions and Comments generated from the October 1, 2013 Council Work Session:

Roadway Elevation and Design Geometrics

1. Is a scenario that sets Dubuque Street protection at 100+1 and a bridge set at 500+1 feasible? What is the difference in elevation and grade change on Dubuque Street between Park Road and Kimball?

Any of the concepts discussed to date feature an acceptable grade on Dubuque Street. There is sufficient distance between the relocated Park Road intersection and the Kimball Road intersection to accommodate any of the combinations of elevations for Dubuque Street and the Park Road Bridge. For example, the greatest change in elevation between Park and Kimball is with a girder bridge with low steel at 500+1 and Dubuque Street at 100+1. The change in elevation is approximately 11.7 feet and the distance between the intersections is approximately 550 feet, for a grade of 3 percent. The existing grade on Dubuque Street between these intersections is approximately 1.5 percent.

For your reference, attached please find a matrix showing the roadway elevations at key locations for the different scenarios discussed.

2. How wide are the lanes on Dubuque currently?

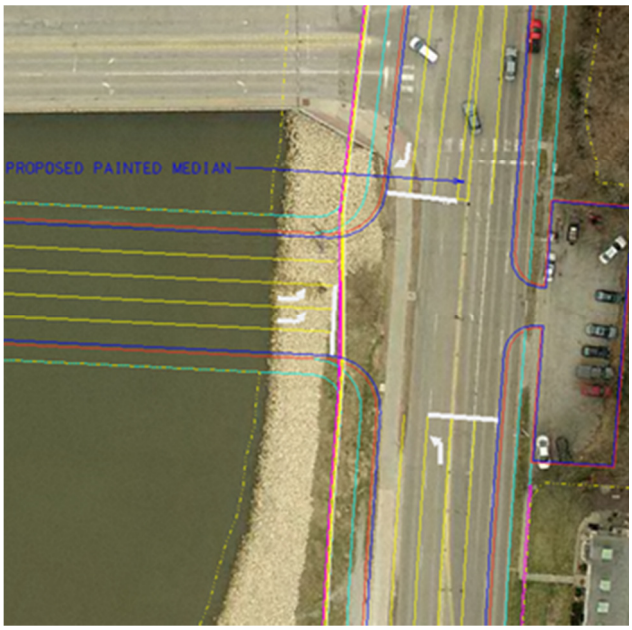
We currently have 12 foot lanes north of the Park Road intersection with a mix of urban (curb & gutter) and rural (shoulder) sections throughout and a speed limit of 35 mph. South of Park Road, lane widths are reduced to 11 feet, the speed limit is lowered to 25 mph, and clear zones adjacent to the roadway are less. This stretch of Dubuque Street transitions to serve a more urban and densely developed environment and provides direct access to the downtown and campus areas. Fraternities and residences also line this stretch of Dubuque Street and many more driveway and alley access points exist.

3. Will there be a median on Dubuque Street to accommodate the dual left turn lanes from EB Park Road to NB Dubuque Street? If so, will there be a raised median in the middle of Dubuque at the intersection or will it be painted?

With the preferred alternative and the staff recommended concepts, there will be a painted median to achieve proper lane alignments and to accommodate the left turn lane from Dubuque Street to Park Road. The median is not affected by the dual left turn lanes from Park Road to northbound Dubuque Street. The figure below displays what the intersection would look like in the preferred alternative. The configuration would be very similar to the painted median that exists today. The existing median provides the spacing necessary to accommodate the 5 lanes (2 SB, 1 NB left turn, 2 NB thru) on Dubuque Street south of the Park Road intersection.

Also, please note that the preferred alternative moves the Dubuque Street alignment approximately 5 to 7 feet to the west north of the Park Road intersection along the Bella Vista bluff, even as it accommodates dual left turns from EB Park Road to NB Dubuque Street.

Current Intersection



Preferred Alternative

Bridge Design

4. Is it possible to design the bridge to accept lateral forces from a flooded Iowa River in order to maintain traffic when floodwater is in contact with low steel? How much more would this cost?

HNTB Corporation will design a bridge that meets the current Iowa DOT design standards and the recommendations of City Council and staff. It is certainly possible to design the bridge to accept more lateral force than current safety factors require. Current safety factors allow for traffic on the bridge when floodwater is in contact with low steel or a point higher on the superstructure. Determining when to close a bridge to traffic is often up to the local government and the traveling public's comfort level. It is not possible to provide details related to the desired design conditions and their resulting costs until we are in the design process.

5. Is the deck thickness of the bridge impacted at all by the width?

The deck thickness can be impacted by the width depending on the type of structure selected.

The width of the structure for a deck girder bridge will not have an effect on the depth of the structure since the girders carry the load from pier to pier. Additional girders would be added to account for the additional width.

The width of the structure for an arch bridge will likely impact the depth of the structure. In order to get the load to the arch ribs, it has to be carried through floor beams that run between the arch ribs. An increased distance between the arch ribs will increase the floor beam length

and depth. At this stage, it is recommended that arch be placed between the sidewalk and the roadway for a partial through arch. The sidewalk framing would be supported by a cantilever.

Design Process

6. Will Council get the opportunity to review plans during the design process? While we (Council) are concerned about efficiency and cost of design, we do not want to get a design we are unhappy with because of so many unknowns up front.

Yes, the attached schedule includes two council work sessions to present and exchange information with regards to the Roadway Design and cross-section issues and Aesthetics and Landscaping. Throughout the final design process, staff and the design team are committed to maintaining an open exchange of information with the Council, residents and other stakeholders.

***Attached, please find the draft design schedule and memo that provides an overview of the design process, timeframes for each phase and milestones for Council input or decisions**. It also notes formal and informal opportunities for public input.*

7. What is the concept statement and when does this happen?

The concept statement provides the Iowa DOT with the basic information regarding the project and improvements being designed, including information regarding location, costs, impacts, as well as existing and proposed design elements of the roadway cross-section. It is required by the DOT for Local Systems Federal Aid Projects. ***Attached, please find a copy of the concept statement form**.*

As displayed in the attached schedule for the design process, staff will submit a concept statement to the Iowa DOT during the conceptual development stage. This will occur approximately 6 weeks into the design process. Staff will meet with Council prior to the concept statement submittal to discuss recommended roadway design parameters throughout the corridor.

Flooding Issues

8. Will a higher bridge pass more water faster?

No. The amount of water flowing through the bridge will remain the same. Since the new bridge is higher and longer, a larger cross-sectional area is provided and the velocity will actually be lower.

9. Is Coralville designing their flood protection projects to protect to a foot above the 100-year floodplain elevation?

Coralville is designing their flood control projects to a 2008+1 elevation except at the Clear Creek Bridge on First Avenue where Coralville is designing protection for 100+1, due to surrounding businesses and their proximity to the roadway. However, they are able to close First Avenue at the bridge and offer protection to 2008+1 using removable flood barriers.

Miscellaneous

10. What view will a person driving on Dubuque Street or walking have?

A goal of the Gateway Project has been to maintain the look and feel of the current corridor. However, we cannot say definitively or display what the views will be from and of the project at this time. That depends on the elevation of the roadway and the bridge, the bridge type, clear zones, etc. As we work through the design issues and the aesthetics and landscaping plans, staff will present those details at a work session during the preliminary design phase.

11. Were the costs staff presented at the work session the cost of the bridge, or the total cost of the project?

Neither, the costs presented were focused on the construction cost of the Gateway and the Park Road 3rd lane improvement projects. An additional $8M will be added to cover design, administration, construction administration, inspection, etc. Also, the Trunk Sewer project will be constructed at the same time and is estimated at $4.4M.

Roadway Elevations at Key Locations

January 15, 2014

Key Spot Elevations		Roadway Elevations							
		500+1 Elevation		2008+1 Elevation		200+1 Elevation		100+1 Elevation	
Cross Street	Existing	Elevation	Diff.	Elevation	Diff.	Elevation	Diff.	Elevation	Diff.
Foster Road	659.84	659.84	0.00	659.84	0.00	659.84	0.00	659.84	0.00
Taft Speedway (old)	646.60	661.10	14.50	658.72	12.12	658.59	11.99	655.21	8.61
Mayflower Driveway	647.00	658.40	11.40	656.02	9.02	655.89	8.89	652.51	5.51
Kimball Road	645.63	658.13	12.50	656.55	10.92	655.62	9.99	653.30	7.67

Key Spot Elevations		Deck Arch Bridge															
		Bridge at 500+1								Bridge at 2008+1				Bridge at 200+1		Bridge at 100+1	
		500+1 Elevation		2008+1 Elevation		200+1 Elevation		100+1 Elevation		2008+1 Elevation		100+1 Elevation		All 200+1 Elevation		All 100+1 Elevation	
Cross Street	Existing	Elevation	Diff.	Elevation	Diff.	Elevation	Diff.	Elevation	Diff.	Elevation	Diff.	Elevation	Diff.	Elevation	Diff.	Elevation	Diff.
Kimball Road	645.63	658.13	12.50	656.55	10.92	655.62	9.99	653.30	7.67	656.55	10.92	653.30	7.67	655.62	9.99	653.30	7.67
Park Road (old)	653.30	663.76	10.46	663.23	9.93	662.92	9.62	662.15	8.85	662.18	8.88	660.56	7.26	661.25	7.95	658.93	5.63
Park Road (new)	656.87	664.03	7.16	664.03	7.16	664.03	7.16	664.03	7.16	662.45	5.58	662.45	5.58	661.52	4.65	659.20	2.33
Brown St.	676.20	675.60	-0.60	675.60	-0.60	675.60	-0.60	675.60	-0.60	675.60	-0.60	675.60	-0.60	675.60	-0.60	675.60	-0.60
Lower City Park Ent.	653.75	656.50	2.75	654.50	0.75	654.50	0.75	654.50	0.75	654.50	0.75	654.50	0.75	654.50	0.75	654.50	0.75
West Hancher Ent.	674.75	675.10	0.35	675.10	0.35	675.10	0.35	675.10	0.35	675.10	0.35	675.10	0.35	675.10	0.35	675.10	0.35
Riverside Drive	702.33	702.33	0.00	702.33	0.00	702.33	0.00	702.33	0.00	702.33	0.00	702.33	0.00	702.33	0.00	702.33	0.00

Key Spot Elevations		Deck Girder Bridge															
		Bridge at 500+1								Bridge at 2008+1				Bridge at 200+1		Bridge at 100+1	
		500+1 Elevation		2008+1 Elevation		200+1 Elevation		100+1 Elevation		2008+1 Elevation		100+1 Elevation		All 200+1 Elevation		All 100+1 Elevation	
Cross Street	Existing	Elevation	Diff.	Elevation	Diff.	Elevation	Diff.	Elevation	Diff.	Elevation	Diff.	Elevation	Diff.	Elevation	Diff.	Elevation	Diff.
Kimball Road	645.63	658.13	12.50	656.55	10.92	655.62	9.99	653.30	7.67	656.55	10.92	653.30	7.67	655.62	9.99	653.30	7.67
Park Road (old)	653.30	664.26	10.96	663.73	10.43	663.42	10.12	662.65	9.35	662.68	9.38	661.06	7.76	661.75	8.45	659.43	6.13
Park Road (new)	656.87	665.03	8.16	665.03	8.16	665.03	8.16	665.03	8.16	663.45	6.58	663.45	6.58	662.52	5.65	660.20	3.33
Brown St.	676.20	675.60	-0.60	675.60	-0.60	675.60	-0.60	675.60	-0.60	675.60	-0.60	675.60	-0.60	675.60	-0.60	675.60	-0.60
Lower City Park Ent.	653.75	656.50	2.75	654.50	0.75	654.50	0.75	654.50	0.75	654.50	0.75	654.50	0.75	654.50	0.75	654.50	0.75
West Hancher Ent.	674.75	675.10	0.35	675.10	0.35	675.10	0.35	675.10	0.35	675.10	0.35	675.10	0.35	675.10	0.35	675.10	0.35
Riverside Drive	702.33	702.33	0.00	702.33	0.00	702.33	0.00	702.33	0.00	702.33	0.00	702.33	0.00	702.33	0.00	702.33	0.00

Key Spot Elevations		Partial Through Arch Bridge															
		Bridge at 500+1								Bridge at 2008+1				Bridge at 200+1		Bridge at 100+1	
		500+1 Elevation		2008+1 Elevation		200+1 Elevation		100+1 Elevation		2008+1 Elevation		100+1 Elevation		All 200+1 Elevation		All 100+1 Elevation	
Cross Street	Existing	Elevation	Diff.	Elevation	Diff.	Elevation	Diff.	Elevation	Diff.	Elevation	Diff.	Elevation	Diff.	Elevation	Diff.	Elevation	Diff.
Kimball Road	645.63	658.13	12.50	656.55	10.92	655.62	9.99	653.30	7.67	656.55	10.92	653.30	7.67	655.62	9.99	653.30	7.67
Park Road (old)	653.30	660.76	7.46	660.23	6.93	659.92	6.62	659.15	5.85	659.18	5.88	657.56	4.26	658.25	4.95	655.93	2.63
Park Road (new)	656.87	661.53	4.66	661.53	4.66	661.53	4.66	661.53	4.66	659.95	3.08	659.95	3.08	659.02	2.15	656.87	0.00
Brown St.	676.20	675.60	-0.60	675.60	-0.60	675.60	-0.60	675.60	-0.60	675.60	-0.60	675.60	-0.60	675.60	-0.60	675.60	-0.60
Lower City Park Ent.	653.75	656.50	2.75	654.50	0.75	654.50	0.75	654.50	0.75	654.50	0.75	654.50	0.75	654.50	0.75	654.50	0.75
West Hancher Ent.	674.75	675.10	0.35	675.10	0.35	675.10	0.35	675.10	0.35	675.10	0.35	675.10	0.35	675.10	0.35	675.10	0.35
Riverside Drive	702.33	702.33	0.00	702.33	0.00	702.33	0.00	702.33	0.00	702.33	0.00	702.33	0.00	702.33	0.00	702.33	0.00

Schedule of Design Phase Activities

Per your request during the October 1 City Council work session, attached please find a schedule of design phase activities for the Iowa City Gateway project. The schedule follows the Iowa DOT's design process flow chart and provides an overview of the major steps in the design process. During the design phase of the project, there will be multiple opportunities for public and City Council input. These design phases and the opportunities for Council and public input are described below.

Pre-Design

The design process will begin with the City Council's approval of the NEPA Preferred Alternative, staff recommendation, or a hybrid concept. The approval will provide staff and the consultant team with the necessary direction on each of the three design parameters discussed at the October 1 Work Session and Council Meeting. The three parameters are: 1) Level of protection for Dubuque Street; 2) Backwater reduction goals; and, 3) Structural type of the bridge.

Concept Development

Depending on the Council's approval, staff and the consultant team will have to update the concept to match the selected parameters. During this stage, the roadway model (horizontal and vertical profiles) will be updated to accommodate the approved bridge type and level of protection for Dubuque Street. At this stage, the concept will utilize the same widths for travel lanes, multiuse paths, parkway, etc. as those specified by Iowa Department of Transportation (DOT). The thematic concepts for landscaping will also be developed during this stage. The early concept development will include a public pre-design meeting and City Council work session. This work session will focus on the specific roadway design elements and pedestrian / bicycle connectivity opportunities throughout the corridor. After the Council work session, concept development will continue, coordination with the Iowa DOT will occur for the submittal of the Concept Statement.

Concept Refinement and Preliminary Design

During this phase, staff and the consultant team will be refining the concept based on Council and public interaction and communication. The concepts will be refined and developed in greater detail (20-30% plan development) addressing roadway, bridge, utilities, sewer, aesthetics, etc. As the Concept Refinement phase wraps up, a new concept statement will be submitted to Iowa DOT and will include the features and impacts of the various design elements. In the Preliminary Design phase, design details will be further refined and a Council work session focused on aesthetics and landscaping will be held. The council will also be asked to approve a resolution initiating the property acquisition process for the project.

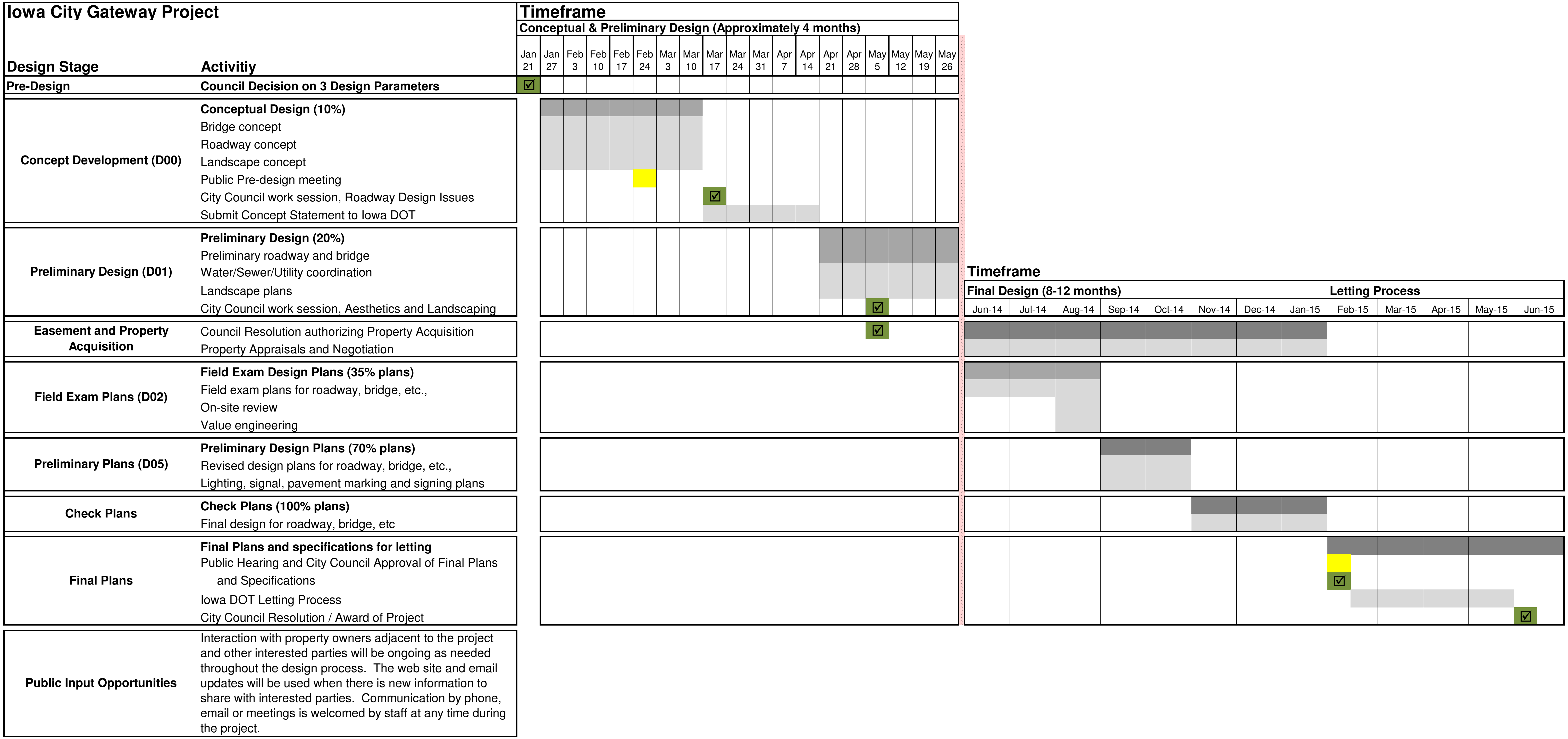
Field Exam, Preliminary, Check and Final Plans

Following the Preliminary Design phase, staff and the consultant team will dive into the detailed design of the project. This includes developing the detailed design plans for all elements including roadway, bridge, permits, maintenance of traffic, etc. that will culminate with the final plans and specifications for letting. There will be opportunities for input throughout these phases, but the focus of issues to address will continue to narrow from the macro-level at 30 percent plans (lane or parkway widths) to the micro-level at 70 percent plans(sidewalk widths or curb and gutter type), before finalizing plans at the 90 and 100 percent deliverables.

In addition to maintaining the open door policy and information exchange during all of these phases, a public hearing will be held during the Final Plans phase.

Please Note: Throughout the design process, staff and the consultant team are committed to maintaining an open exchange of information with the Council, residents and other stakeholders. This includes being available during design to share the latest detailed information, listen to comments and address concerns. At key points in the design process, the website will be updated with new information and emails will be sent to those requesting updates.

IOWA CITY GATEWAY
FINAL DESIGN SCHEDULE
November 15, 2014



Iowa City Gateway Project

Timeframe

Conceptual & Preliminary Design (Approximately 4 months)

Design Stage	Activitiy	Jan 21	Jan 27	Feb 3	Feb 10	Feb 17	Feb 24	Mar 3	Mar 10	Mar 17	Mar 24	Mar 31	Apr 7	Apr 14	Apr 21	Apr 28	May 5	May 12	May 19	May 26
Pre-Design	**Council Decision on 3 Design Parameters**	☑																		
Concept Development (D00)	**Conceptual Design (10%)**		▓	▓	▓	▓	▓	▓	▓											
	Bridge concept		░	░	░	░	░	░	░											
	Roadway concept		░	░	░	░	░	░	░											
	Landscape concept		░	░	░	░	░	░	░											
	Public Pre-design meeting						🟨													
	City Council work session, Roadway Design Issues									☑										
	Submit Concept Statement to Iowa DOT									░	░	░	░	░						
Preliminary Design (D01)	**Preliminary Design (20%)**														▓	▓	▓	▓	▓	▓
	Preliminary roadway and bridge														▓	▓	▓	▓	▓	▓
	Water/Sewer/Utility coordination														░	░	░	░	░	░
	Landscape plans														░	░	░	░	░	░
	City Council work session, Aesthetics and Landscaping																☑			
Easement and Property Acquisition	Council Resolution authorizing Property Acquisition																☑			
	Property Appraisals and Negotiation																			

Timeframe

Design Stage	Activitiy	**Final Design (8-12 months)**								**Letting Process**				
		Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15
Easement and Property Acquisition	Council Resolution authorizing Property Acquisition	▓	▓	▓	▓	▓	▓	▓	▓					
	Property Appraisals and Negotiation	░	░	░	░	░	░	░	░					
Field Exam Plans (D02)	**Field Exam Design Plans (35% plans)**	▓	▓	▓										
	Field exam plans for roadway, bridge, etc.,	░	░	░										
	On-site review			░										
	Value engineering			░										
Preliminary Plans (D05)	**Preliminary Design Plans (70% plans)**				▓	▓								
	Revised design plans for roadway, bridge, etc.,				░	░								
	Lighting, signal, pavement marking and signing plans				░	░								
Check Plans	**Check Plans (100% plans)**						▓	▓	▓					
	Final design for roadway, bridge, etc						░	░	░					
Final Plans	**Final Plans and specifications for letting**									▓	▓	▓	▓	▓
	Public Hearing and City Council Approval of Final Plans									🟨				
	and Specifications									☑				
	Iowa DOT Letting Process									░	░	░	░	
	City Council Resolution / Award of Project													☑

Design Stage	Activitiy
Public Input Opportunities	Interaction with property owners adjacent to the project and other interested parties will be ongoing as needed throughout the design process. The web site and email updates will be used when there is new information to share with interested parties. Communication by phone, email or meetings is welcomed by staff at any time during the project.

☑ Denotes City Council work session or formal meeting

Iowa Department of Transportation
Form 517001 (08-05)

CONCEPT STATEMENT FOR LOCAL SYSTEMS FEDERAL AID PROJECTS

Please Note: Before completing this form, refer to the Concept Statement Instructions located in Index No. 6 of the Project Development Information Packet (referred to herein as the Packet)**.**

GENERAL INFORMATION:

County: _____ City: _____ Date Submitted: _____ ☐ First ☐ Revised

Project Number: _____ STIP Year: _____ Estimated Letting Date: _____

Contact Person: _____ Phone Number: _____

Title: _____ FAX Number: _____

Address: _____ E-mail: _____

1.a. Project Location(s) (include road or street name(s) & project limits): **ATTACH A DETAILED LOCATION**

_____

1.b. Project Title/Description: _____

2. Type of Work (check all that apply):

☐ HMA Paving	☐ Grading	☐ PCC Widening	☐ Bicycle or pedestrian facilities
☐ HMA Resurfacing	☐ Intersection Modifications	☐ RCB Culvert	☐ Scenic or landscaping improvements
☐ HMA Widening	☐ Lighting	☐ Traffic Signals	☐ Historic restoration or renovation
☐ Bridge Replacement	☐ Patching	☐ Other (describe)	_____
☐ Bridge Rehabilitation	☐ PCC Paving		

3. Project Length: _____ ☐ Miles ☐ km (to nearest tenth)

4. Existing Bridge information: FHWA No.: _____ Year Built: _____ Size: _____

Type: _____

5. Project Costs: For each item that applies, indicate if Federal aid reimbursement will be requested. If Yes, enter the estimated cost

Federal aid?	Cost Item	Estimated Cost
☐ Yes ☐ No	Preliminary engineering (if Yes, see Index No. 1 of the Packet for procedures)	$ _____
☐ Yes ☐ No	Construction engineering (if Yes, see Index No. 1 of the Packet for procedures)	$ _____
☐ Yes ☐ No	Acquisition of land or property rights (if Yes, see Flow Chart No. 8 in the Packet)	$ _____
☐ Yes ☐ No	Construction	$ _____
☐ Yes ☐ No	Utility relocation (if Yes, see Flow Chart No. 9 in the Packet)	$ _____
☐ Yes ☐ No	Railroad work (if Yes, see Flow Chart No. 9 in the Packet)	$ _____
	In-kind contribution (attach documentation as per Index No. 4 of the Packet)	$ _____

6. Total Federal Aid (as shown in the STIP): $ _____ Total Estimated Project Cost $ _____

7. Estimate of Land or Property Acquisition Impacts: - Will the proposed project: **ANSWER ALL SIX QUESTIONS**

a. Require temporary construction easements? ☐ Yes ☐ No
If Yes, indicate the approximate area (acres): _____

b. Require permanent easement(s) or fee title? ☐ Yes ☐ No
If Yes, indicate the approximate area (acres): _____

c. Require borrow material? ☐ Yes ☐ No
If Yes, indicate the proposed source (check all that apply):
☐ New borrow area ☐ Not yet determined
☐ Existing borrow area ☐ Contrator furnished ☐ Within existing right-of-way

d. Require total property acquisition(s)? ☐ Yes ☐ No
If Yes, approximately how many properties will be totally acquired? _____

e. Involve relocation assistance for displaced person(s) and/or businesses? ☐ Yes ☐ No If Yes, approximately how many relocations will be required? _____

f. Involve a change in property access which results in damage to the remainder of the parcel? ☐ Yes ☐ No

8. Public Acceptance: Is it anticipated that the proposed project will receive a substantial degree of public opposition? ☐ Yes ☐ No
If Yes, explain:

9. Environmental Impacts - Will the proposed project:

ANSWER ALL QUESTIONS

☐ Yes ☐ No a. Involve any undisturbed land, either public or private, including new borrow areas? If Yes, archaeological assessment and / or survey will be required. If No, and any of questions 7.a through 7.c are checked Yes, or if a new borrow area will be used, attach additional information to show that the land required for the property acquisitions, temporary or permanent easements, or new borrow areas has already been disturbed.

☐ Yes ☐ No b. Be in the proximity of any known archaeological site? If Yes, an archaeological assessment and / or survey will be required.

☐ Yes ☐ No c. Be in the proximity of any house, building, bridge, or other structure more than 50 years old? If Yes, an historic evaluation and / or survey will be required.

☐ Yes ☐ No d. Be in the proximity of any known historic building, district, bridge, roadway, or structure? If Yes, an historic evaluation and / or survey will be required.

(1) Does the project involve an historic roadway? ☐ Yes ☐ No If Yes, list: _____

(2) Do the existing streets to be improved using federal funds contain brick pavers? ☐ Yes ☐ No

(3) Does the project involve an historic bridge? ☐ Yes ☐ No

If Yes, List: _____

☐ Yes ☐ No ☐ N/A e. If any of questions 9.a - 9.d are checked Yes, have the associated archaeological and / or historical investigations been completed? If Yes, attach the State Historical Preservation Officer (SHPO) approval letter(s).

☐ Yes ☐ No f. Be in the proximity of a recreational area (i.e., park, playground, trail, greenbelt, etc.) or wildlife refuge? If Yes, answer the following questions:

(1) Is the property used as a recreational area or wildlife refuge? ☐ Yes ☐ No

(2) Is the property publicly owned? ☐ Yes ☐ No

(3) If a recreational area, is it open to the public? ☐ Yes ☐ No

If the answers to all of questions 9.f (1) - 9.f (3) are Yes for a recreational area, or if the answers to both questions 9.f (1) and 9.f (2) are Yes for a wildlife refuge, complete and submit the applicable portions of Environmental Data Sheet (Form 517006). Refer to the Environmental Data Sheet Instructions for more information.

☐ Yes ☐ No g. Involve placement of fill in waters of the United States, including wetlands? If Yes, refer to the County Engineers Instructional Memorandum (I.M.) 3.13 to determine if a 404 permit is needed.

☐ Yes ☐ No h. Affect a floodplain or floodway? If Yes, refer to I.M. 3.131 to determine if a permit is needed.

☐ Yes ☐ No i. Disturb one or more acres of land? If Yes, NPDES General Permit No. 2 will be required from the Iowa DNR. When estimating the amount of disturbed land area, include all areas where soil will be exposed at any time to erosive forces. Refer to Storm Water Permits in Index No. 8 for more information.

☐ Yes ☐ No j. Involve the acquisition of more than five acres of farmland in any one mile (or less) length of the project? If Yes, complete the Farmland Conversion Impact Rating (Form AD-1006).

☐ Yes ☐ No k. Be in the proximity of known Federal or State threatened or endangered species or their habitat? If Yes, complete and submit the applicable portions of the Environmental Data Sheet (Form 517006).

☐ Yes ☐ No l. Involve the cleanup of any known hazardous materials? If Yes, describe them below:

☐ Yes ☐ No m. Have probable significant noise, air quality, or water quality impacts that may raise public concern or warrant special mitigation measures? If Yes, describe the types of impacts anticipated and the proposed mitigation, if any:

10. Miscellaneous Items - Will the proposed project:

☐ Yes ☐ No a. Be within a 20,000 foot radius of a public airport? If yes, refer to I.M. 3.15 to determine if the Federal Aviation Administration (FAA) may need to be notified.

☐ Yes ☐ No b. Have a railroad crossing or railroad signals within its limits? If yes, contact the railroad company to determine if an agreement will be required. If the railroad has already been contacted, will the project require an agreement between the railroad and the LPA? ☐ Yes ☐ No ☐ Not Yet Determined

☐ Yes ☐ No c. Include Intelligent Transportation System (ITS) elements?

11. Project Design Elements -- Provide the project design information requested below. If the project involves multiple facilities, or significantly different sections on the same facility, complete a separate page for each. For design elements that are not applicable for the facility listed below, enter "N/A" in the appropriate space. If the project does not involve a roadway, bicycle trail, or shared use path, this page may be left blank.

Facility Name: _____

Federal Functional Classification: ☐ Interstate ☐ Other Principal Arterial ☐ Minor Arterial
☐ Rural Major Collector ☐ Rural Minor Collector ☐ Urban Collector ☐ Local ☐ N/A (trail or path)

Traffic Volumes: Existing AADT: _____ (Year = _____) Design Year AADT: _____ (Year = _____) % Trucks _____

Design Speed: _____ mph **Posted Speed:** _____ mph

Terrain: ☐ Level ☐ Rolling **Type of Area:** ☐ Commercial or Industrial ☐ Fringe or Residential ☐ Rural

Design Guidelines (check only one)

For urban roadways, use the design guidelines contained in Index No. 5 of the Packet and indicate which table was used below:
☐ Urban Design Aids ☐ Alternative Urban Design Guides* ☐ Urban 3R Guidelines

For rural roadways, use the design guidelines contained in I.M.s 3.210 or 3.214 and indicate which table was used below:
☐ Design Aids for Rural Collectors ☐ AASHTO Guidelines for Rural Collectors*
☐ Design Aids for Rural Local Roads ☐ AASHTO Guidelines for Rural Local Roads*
☐ 3R Table for Rural Collectors (if checked, indicate type of improvement: ☐ Rehabilitation ☐ Restoration ☐ Resurfacing)

(*If any of these tables are used, explain reasons for not using the "Aids" tables in the cover letter or e-mail that accompanies this form.)

☐ For bicycle trails or shared use paths, use the most current edition of the Urban Design Standards Manual, Chapter 8, Section 2, Table 2.1.

Design Exceptions: Will a design exception be required? ☐ Yes ☐ No If Yes, attach documentation for each esception requested.

Design Element	Existing	Proposed
All Roadways (urban or rural)		
Number of traffic lanes		
Travel lane width (ft.)		
Travelled way surface type		
Urban Roadways		
Total roadway width (ft) (back-of-curb to back-of-curb)		
Curb and gutter width (ft)		
Median width (ft) and type	☐ Raised ☐ Painted	☐ Raised ☐ Painted
On-street parking lane width (ft)		
Horizontal clearance (ft)		
Rural Roadways		
Roadway top width (ft) (shoulder-to-shoulder)		
Shoulder surface type		
Shoulder width (ft)		
Foreslope ratio (horizontal: vertical)		
Clear zone (ft)	N/A	
Bridges (urban or rural)		
Bridge roadway width (ft)		
Is guardrail present?	☐ Yes ☐ No	☐ Yes ☐ No
Is guardrail proposed?	N/A	☐ Yes ☐ No
Will channel change be required?	N/A	☐ Yes ☐ No
Bicycle Trails or Shared Use Paths		
Trail/ path surface width (ft) and traffic direction:	☐ 2-Way ☐ 1-Way	☐ 2-Way ☐ 1-Way
Trail or path surface type		
Shoulder width (ft)		
Lateral clearance (ft)		
Vertical clearance (ft)		
Clear width of path on bridge (ft)		
Traffic Signals		
If new traffic signals are proposed, are MUTCD warrants met?	N/A	☐ Yes ☐ No ☐ N/A
If yes, which warrants are met?	N/A	

Updated Links to project-related documents:

Iowa City web site home page:
http://www.iowacitygateway.org/

Finding of No Significant Impact document:
http://www.iowacitygateway.org/wp-content/uploads/IowaCityGateway-FONSI.pdf

Environmental Assessment document:
http://icgpreferredalternative.businesscatalyst.com/ea-document.html

Maps of the preferred alternatives, including grade change info, cross sections and elevations, temporary construction impacts and right of way changes:
http://icgpreferredalternative.businesscatalyst.com/index.html

Draft renderings of the final project:
http://icgpreferredalternative.businesscatalyst.com/renderings.html

Public Hearing transcript, April 4, 2013:
http://www.iowacitygateway.org/wp-content/uploads/HearingTranscript.pdf

Video of the Public Hearing, April 4, 2013
http://view.earthchannel.com/PlayerController.aspx?PGD=iowacity&eID=431

Public comments submitted during the official comment period:
http://www.iowacitygateway.org/wp-content/uploads/AllComments2013-05-17.pdf

September 17, 2013 and October 1, 2013 City Council Presentations and the City Council Packet Contents:
http://www.iowacitygateway.org/resources/

Bridge Type and Level of Protection Comparison

January 15, 2014

Bridge Type	Low Steel Elevation	Backwater Reduction at Idyllwild	Incremental Improvement in Backwater Reduction	Deck Elevation	Incremental Height of Bridge Deck	Construction Cost Estimate with Dubuque at 100yr + 1'	Construction Cost Estimate with Dubuque at 200yr + 1'	Construction Cost Estimate with Dubuque at 2008 + 1'	Construction Cost Estimate with Dubuque at 500yr + 1'
Deck Girder	100yr + 1'	3.4"		660.20		$32.67 M		$34.26 M	
Deck Girder	200yr + 1'	6.1"	2.7"	662.52	27.8"	$32.97 M	$34.63 M	$35.01 M	
Deck Girder	2008 + 1'	6.6"	0.5"	663.45	11.2"	$33.41 M		$35.17 M	
Deck Girder	500yr + 1'	7.0"	0.4"	665.03	19.0"	$34.20 M	$35.01 M	$35.34 M	$36.65 M **EA Preferred Alternative**
Deck Arch	100yr + 1'	3.6"		659.20		$36.01 M		$37.59 M	
Deck Arch	200yr + 1'	4.7"	1.1"	661.52	27.8"	$36.30 M	$37.96 M	$38.34 M	
Deck Arch	2008 + 1'	5.2"	0.5"	662.45	11.1"	$36.71 M		$38.48 M	
Deck Arch	500yr + 1'	5.6"	0.4"	664.03	19.0"	$36.94 M	$38.33 M	$38.66 M	$39.98 M
Through Arch	100yr + 1'	3.4"		656.87		$35.99 M		$37.58 M	
Through Arch	200yr + 1'	4.9"	1.5"	659.02	25.8"	$36.26 M	$37.93 M	$38.31 M	
Through Arch	2008 + 1'	5.2"	0.3"	659.95	11.1"	$36.70 M		$38.47 M	
Through Arch	500yr + 1'	5.8"	0.6"	661.53	19.0"	$36.90 M	$38.30 M	$38.63 M	$39.60 M