

ITEM #: 20  
DATE: 05-26-20

**COUNCIL ACTION FORM**

**SUBJECT: APPROVAL OF ICAAP GRANT FOR FY 2020/21 ITS PROGRAM  
(PHASE 1 – TRAFFIC NETWORK)**

**BACKGROUND:**

The 2020/21 Capital Improvements Plan (CIP) has a project in the Intelligent Transportation System (ITS) Program to build out the first phase of the City’s Traffic Network Master Plan. The traffic network will be a city-wide communication network capable of supporting current and future transportation technologies. These technologies include adaptive traffic systems, video, sensors, and other data collectors that are commonly referred to as “Smart City” technologies.

The City submitted an Iowa Clean Air Attainment Program (ICAAP) grant for phase one of the proposed network (see attached map). In April 2020, the City was notified by the Iowa DOT that the application was approved for \$1,176,518 in eligible costs related to the project. These funds require a 20% local match, which is estimated to be \$235,304.

**Once the grant agreement is approved and authorization is given by the DOT and FHWA to proceed, an RFP will be issued for a design consultant to conduct a systems engineering design of the network. It is expected that Phase 1 of the traffic network will incur the majority of the design work and specifications development as well as the installation of fiber in the initial phase shown in blue on the attached map.** Each subsequent phase will use the systems engineering documents in the deployment of the ultimate buildout of the network.

**ALTERNATIVES:**

1. Approve the ICAAP Grant Agreement for Phase 1 of the City of Ames Traffic Network for \$1,176,518.
2. Reject the agreement.

**MANAGER’S RECOMMENDED ACTION:**

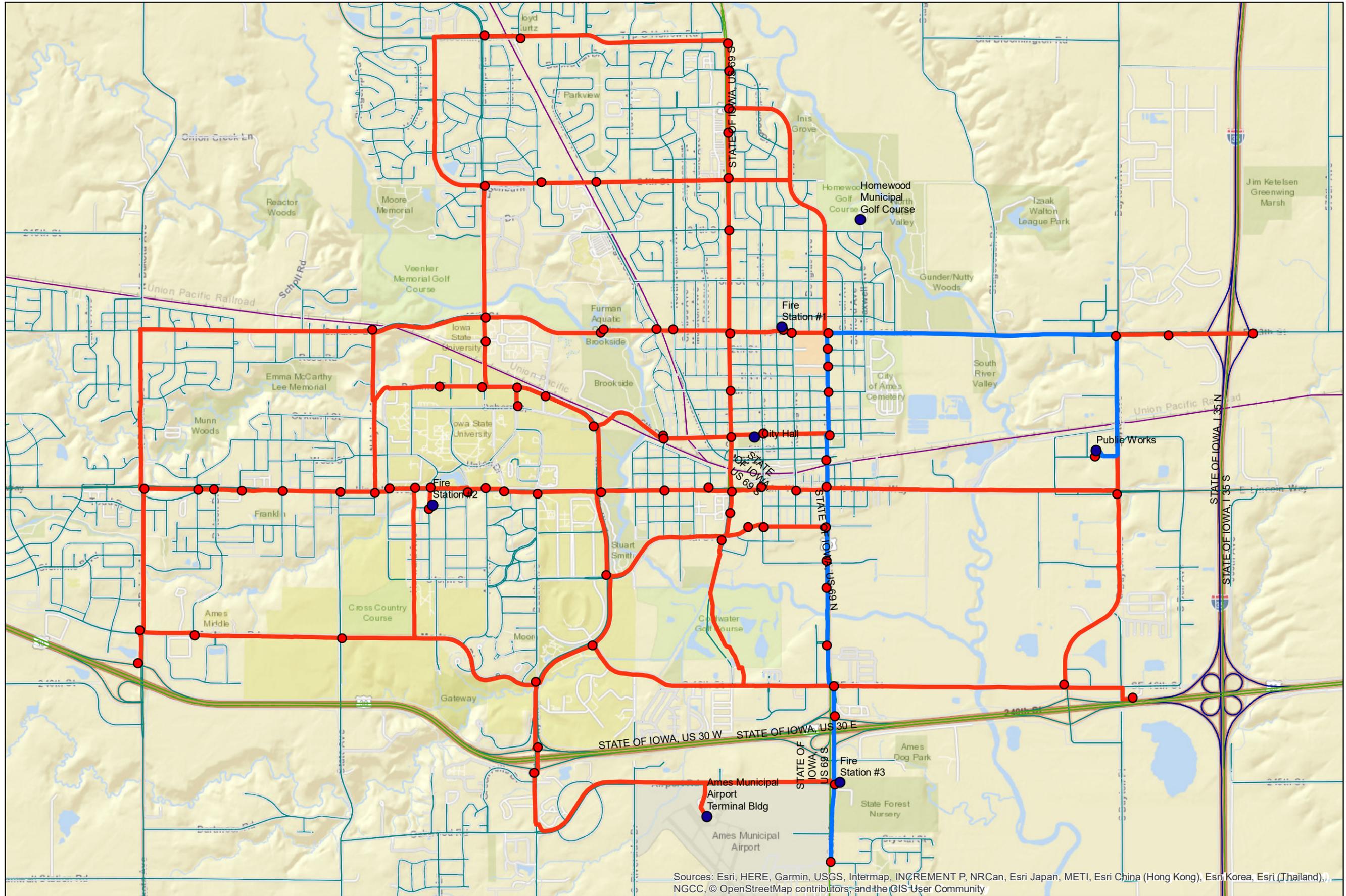
ICAAP grant funding is critical to the financing of the traffic network, which will significantly reduce the burden on local funding sources. The network will substantially modernize the City’s infrastructure, making it ready for future technologies and innovations. These technologies will ultimately relieve traffic congestion and reduce pollution along all major arterial corridors within the City.

**Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, as noted above.**

**It is important to note that, as recommended in the traffic signal master plan, standard practice will be to use single-mode 144 strand fiber (12 fibers in 12 tubes). Any available dark fiber may be used to support other critical City Departmental communications needs, especially those that would benefit from integration with, or connection to, planned transportation technology improvements. Private sector companies may also use the dark fiber or spare conduit (for co-location of communication cable) once a network use policy is in place, and City Council has approved a lease or other use agreement.**

# City of Ames - Phase 1 Fiber Interconnect

Date: 9/13/2019



## Legend

- Traffic\_Signal
- New\_Traffic\_Signal
- COA\_ROW

## New 144 Count Fiber

- Proposed Future Fiber
- Proposed Phase 1

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community

**IOWA DEPARTMENT OF TRANSPORTATION**  
**Agreement for an**  
**Iowa's Clean Air Attainment Program (ICAAP) Federal-aid Swap Project**

Recipient: **City of Ames**

Project Number(s): **ICAAP-SWAP-0155(702)—SH-85**

Iowa DOT Agreement Number: **2020-ICAAP-SWAP-02**

This agreement, made as of the date of the last party's signature below, is between City of Ames, Iowa (hereinafter referred to as the Recipient) and the Iowa Department of Transportation (hereinafter referred to as the Department) for Iowa's Clean Air Attainment Program (ICAAP) Federal-aid Swap funds under 761 Iowa Administrative Code (IAC) Chapter 162. Iowa Code Section 306A.7 provides for the Recipient and the Department to enter into agreements with each other for the purpose of financing transportation improvement projects on streets and highways in Iowa.

Pursuant to the terms of this agreement, applicable statutes, and administrative rules, the Department agrees to provide ICAAP Federal-aid Swap funding to the Recipient for the authorized and approved costs for eligible items associated with the project.

Under this agreement, the parties further agree as follows:

1. The Recipient shall be the lead local governmental agency for carrying out the provisions of this agreement.
2. All notices required under this agreement shall be made in writing to the appropriate contact person. The Department's contact person will be Jared Smith, Office of Systems Planning, 800 Lincoln Way, Ames, Iowa 50010, 515-239-1713. The Recipient's contact person shall be the Damion Pregitzer, City of Ames, 515 Clark Ave, Ames, Iowa 50010, 515-239-5160.
3. The Recipient shall be responsible for the development and completion of the following described ICAAP project:

First Phase Deployment Ames Traffic Signal Master Plan

4. Eligible project activities will be limited to the following: construction, engineering, inspection, and right-of-way acquisition. Under certain circumstances, eligible activities may also include utility relocation or railroad work that is required for construction of the project. Systems engineering analysis and product procurement and installation are also eligible activities for Adaptive Signal Control Technology projects only. All costs must be directly related to the project described in this agreement. Costs incurred prior to the date of this agreement are not eligible for reimbursement. The Department has the sole authority to determine the eligibility of a cost for reimbursement.
5. The Recipient shall receive reimbursement for costs of authorized and approved eligible project activities from ICAAP Federal-aid Swap funds. The portion of the project costs reimbursed with

ICAAP Federal-aid Swap funds shall be limited to a maximum of either 80 percent of eligible costs or \$(1,176,518), whichever is less.

6. Eligible project costs in excess of the amount reimbursed by the Department above will be considered the local contribution. The local contribution must equal a minimum of 20 percent of eligible project costs.
7. The Recipient shall be responsible for including the project in the appropriate Regional Planning Affiliation (RPA) or Metropolitan Planning Organization (MPO) Transportation Improvement Program (TIP). The Recipient shall also ensure that the appropriate RPA or MPO, through their TIP submittal to the Department, includes that project in the Statewide Transportation Improvement Program (STIP). If the project is not included in the appropriate fiscal year of the STIP, funds will not be reimbursed.
8. The Recipient must have let the contract or have otherwise completed the project within two years of October 1, 2020. If the Recipient does not do this, they will be in default for which the Department can revoke funding commitments. The Department may approve extensions of this agreement for periods up to six months upon receipt of a written request from the Recipient at least sixty (60) days prior to the deadline.
9. The Recipient shall provide a summary report measuring the success of its effect on vehicle emissions to the Department upon completion of the project and prior to requesting final reimbursement of ICAAP Federal-aid Swap funds. The report will include before and after project emissions calculations comparing new data compiled after project completion to the data submitted with the project application. Through a quantitative analysis, the summary must show how many kilograms of pollutants (including CO, VOC, NOx, and if applicable PM) have been reduced. The preparation of this summary may require additional data collection or modeling. These tasks or services are not considered project costs and are not eligible for reimbursement.
10. If the project purpose is to implement, deploy, or install ASCT, the Recipient will complete a systems engineering analysis appropriate to the scale of the project in accordance with the August 2012 Federal Highway Administration (FHWA) publication, "Model Systems Engineering Documents for Adaptive Signal Control Technology Systems." This document is available on the FHWA website at: [https://ops.fhwa.dot.gov/publications/fhwahop11027/mse\\_asct.pdf](https://ops.fhwa.dot.gov/publications/fhwahop11027/mse_asct.pdf). This analysis will be submitted to the Department for review and approval. Costs associated with the preparation of this analysis are eligible project costs. The Recipient will follow the guidance provided by this analysis in the evaluation, selection, and implementation of ASCT.
11. If the Recipient fails to perform any obligation under this agreement, the Department shall have the right, after first giving thirty (30) days written notice to the Recipient by certified mail return receipt requested, to declare any part or all of this agreement in default. The Recipient shall have thirty (30) days from date of mailing of the notice to cure the default. If the Recipient cures the default, the Recipient shall notify Department no later than five (5) days after cure or before the end of said thirty (30) day period given to cure the default. The Department may thereafter determine whether the default has, in fact, been cured, or whether the Recipient remains in default.

12. This agreement may be declared to be in default by the Department if the Department determines that the Recipient's application for funding contained inaccuracies, omissions, errors or misrepresentations; or if the Department determines that the project is not developed as described in the application and according to the requirements of this agreement.
13. In the event a default is not cured the Department may do any of the following: a) revoke funding commitments of funds loaned or granted by this agreement; b) seek repayment of funds loaned or granted by this agreement; or c) revoke funding commitments of funds loaned or granted by this agreement and also seek repayment of funds loaned or granted by this agreement. By signing this agreement the Recipient agrees to repay said funding if they are found to be in default. Repayment methods may include cash repayment, installment repayments with negotiable interest rates, or other methods as approved by the Department.
14. The Recipient shall maintain, or cause to be maintained for the intended public use, the improvement for twenty (20) years from the completion date in a manner acceptable to the Department.
15. This agreement is not assignable without the prior written consent of the Department.
16. If any part of this agreement is found to be void and unenforceable, the remaining provisions of this agreement shall remain in effect.
17. It is the intent of both parties that no third-party beneficiaries be created by this agreement.
18. This agreement and the attached Exhibit 1 constitute the entire agreement between the Department and the Recipient concerning this project. Representations made before the signing of this agreement are not binding, and neither party has relied upon conflicting representations in entering into this agreement. Any change or alteration to the terms of this agreement shall be made in the form of an addendum to this agreement. The addendum shall become effective only upon written acceptance of the Department and the Recipient.

IN WITNESS WHEREOF, each of the parties hereto has executed this agreement as of the date shown opposite its signature below.

**RECIPIENT: City of Ames** [use only if the Recipient is a city]

By: \_\_\_\_\_ Date \_\_\_\_\_, \_\_\_\_\_

Title: Mayor \_\_\_\_\_

**CERTIFICATION:**

I, \_\_\_\_\_, certify that I am the Clerk of the city, and that  
(Name of City Clerk)

\_\_\_\_\_, who signed said Agreement for and on behalf of  
(Name of Mayor/Signer Above)

the city was duly authorized to execute the same by virtue of a formal resolution duly passed and adopted by the city, on the \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

Signed: \_\_\_\_\_

City Clerk of Ames, Iowa.

**RECIPIENT: [insert county name] County** [use only if the Recipient is a county]

This agreement was approved by official action of the [county name] Board of Supervisors in official session on the \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

\_\_\_\_\_  
County Auditor

\_\_\_\_\_  
Chair, Board of Supervisors

Signed: \_\_\_\_\_  
(Witness to Signature)

**IOWA DEPARTMENT OF TRANSPORTATION**

Planning, Programming and Modal Division

800 Lincoln Way, Ames, Iowa 50010

Tel. 515-239-1664

By: \_\_\_\_\_ Date \_\_\_\_\_, \_\_\_\_\_

Craig Markley

Director

Office of Systems Planning

## EXHIBIT 1

### General Agreement Provisions for use of ICAAP Federal-aid Swap Funds on Non-primary Projects

Unless otherwise specified in this agreement, the Recipient shall be responsible for the following:

#### 1. General Requirements.

- a. The Recipient shall take the necessary actions to comply with applicable State and Federal laws and regulations. To assist the Recipient, the Department has provided guidance in the Instructional Memorandums to Local Public Agencies (I.M.s), available on-line at: [https://iowadot.gov/local\\_systems/publications/im/lpa\\_ims](https://iowadot.gov/local_systems/publications/im/lpa_ims). The Recipient shall follow the applicable procedures and guidelines contained in the I.M.s in effect at the time project activities are conducted.
- b. In accordance with Iowa Code Chapter 216 and associated subsequent nondiscrimination laws and regulations, the Recipient shall not discriminate against any person on the basis of race, color, creed, age, sex, sexual orientation, gender identity, national origin, religion, pregnancy, or disability.
- c. The Recipient shall comply with the requirements of Title II of the Americans with Disabilities Act of 1990 (ADA), Section 504 of the Rehabilitation Act of 1973 (Section 504), the associated Code of Federal Regulations (CFR) that implement these laws, and the guidance provided in I.M. 1.080, ADA Requirements. When pedestrian facilities are constructed, reconstructed, or altered, the Recipient shall make such facilities compliant with the ADA and Section 504.
- d. The Recipient agrees to indemnify, defend, and hold the Department harmless from any action or liability arising out of the design, construction, maintenance, placement of traffic control devices, inspection, or use of this project. This agreement to indemnify, defend, and hold harmless applies to all aspects of the Department's application review and acceptance process, plan and construction reviews, and funding participation.
- e. Termination of funds. Notwithstanding anything in this agreement to the contrary, and subject to the limitations set forth below, the Department shall have the right to terminate this agreement without penalty and without any advance notice as a result of any of the following: 1) The Federal government, legislature or governor fail in the sole opinion of the Department to appropriate funds sufficient to allow the Department to either meet its obligations under this agreement or to operate as required and to fulfill its obligations under this agreement; or 2) If funds are de-appropriated, reduced, not allocated, or receipt of funds is delayed, or if any funds or revenues needed by the Department to make any payment hereunder are insufficient or unavailable for any other reason as determined by the Department in its sole discretion; or 3) If the Department's authorization to conduct its business or engage in activities or operations related to the subject matter of this agreement is withdrawn or materially altered or modified. The Department shall provide the Recipient with written notice of termination pursuant to this section.

## **2. Design and Consultant Services**

- a. The Recipient shall be responsible for the design of the project, including all necessary plans, specifications, and estimates (PS&E). The project shall be designed in accordance with the design guidelines provided or referenced by the Department in the Guide and applicable I.M.s.

## **3. Environmental Requirements and other Agreements or Permits.**

- a. The Recipient shall obtain project permits and approvals, when necessary, from the Iowa Department of Cultural Affairs (State Historical Society of Iowa; State Historic Preservation Officer), Iowa Department of Natural Resources, U.S. Coast Guard, U.S. Army Corps of Engineers, the Department, or other agencies as required. The Recipient shall follow the applicable procedures in the Instructional Memorandums to Local Public Agencies Table of Contents, Chapter 4 – Environmental Regulations.

## **4. Right-of-Way, Railroads, and Utilities.**

- a. The Recipient shall acquire the project right-of-way, whether by lease, easement, or fee title, and shall provide relocation assistance benefits and payments in accordance with the procedures set forth in I.M. 3.600, Right-of-Way Acquisition, and the Department's Office of Right of Way Local Public Agency Manual. The Recipient shall contact the Department for assistance, as necessary, to ensure compliance with the required procedures.
- b. If a railroad crossing or railroad tracks are within or adjacent to the project limits, the Recipient shall obtain agreements, easements, or permits as needed from the railroad. The Recipient shall follow the procedures in I.M. 3.670, Work on Railroad Right-of-Way.
- c. The Recipient shall obtain agreements from utility companies as needed. The Recipient shall comply with the "Policy for Accommodating Utilities on the County and City a Non-Primary Federal-aid Road System" for projects on non-primary Federal-aid highways. For projects connecting to or involving some work inside the right-of-way for a primary highway, the Recipient shall follow the Department's "Policy for Accommodating and Adjustment of Utilities on the Primary Road System" The Recipient should also use the procedures outlined in I.M. 3.640, Utility Accommodation and Coordination, as a guide to coordinating with utilities.

## **5. Contract Procurement.**

The following provisions apply only to projects involving physical construction or improvements to transportation facilities. Such projects will let at the Department.

- a. The project plans, specifications, and cost estimate (PS&E) shall be prepared and certified by a professional engineer or architect, as applicable, licensed in the State of Iowa.
- b. The Recipient shall be responsible for the following:
  - i. Prepare and submit the PS&E and other contract documents to the Department for review and acceptance in accordance with I.M. 3.700, Check and Final Plans and I.M. 3.500, Bridge or Culvert Plans, as applicable.

- ii. The contract documents shall use the Department's Standard Specifications for Highway and Bridge Construction. Prior to their use in the PS&E, specifications developed by the Recipient (special provisions) for individual construction items shall be approved by the Department.
- iii. Follow the procedures in I.M. 5.030, Iowa DOT Letting Process, to analyze the bids received; make a decision to either award a contract to the lowest responsive bidder or reject all bids; and if a contract is awarded, execute the contract documents and return to Department.

Note: The Department may not be able to allow a project to be let in the scheduled letting due to possible issues with cash flow availability.

- c. The Recipient shall forward a completed Project Development Certification (Form 730002) to the Department in accordance with I.M. 5.050, Project Development Certification Instructions. The project will not be turned in for bid letting until the Department has reviewed and accepted the Project Development Certification.
- d. If the Recipient is a city, the Recipient shall comply with the public hearing requirements of the Iowa Code section 26.12.
- e. The Recipient shall not provide the contractor with notice to proceed until after receiving written notice that the Department has concurred in the contract award.

## **6. Construction.**

- a. The Recipient shall follow the procedures in I.M. 6.000, Construction Inspection, and the Department's Construction Manual, as applicable, for conducting construction inspection activities. The Recipient's engineer shall at all times be responsible for inspection of the project.
- b. A full-time employee of the Recipient shall serve as the person in responsible charge of the project. For cities that do not have any full time employees, the mayor or city clerk will serve as the person in responsible charge, with assistance from the Department.
- c. Traffic control devices, signing, or pavement markings installed within the limits of this project shall conform to the "Manual on Uniform Traffic Control Devices for Streets and Highways" per 761 IAC Chapter 130. Proper protective measures and devices such as fences, barricades, signs, flood lighting, and warning lights as needed.
- d. The project shall be constructed under the Department's Standard Specifications for Highway and Bridge Construction and the Recipient shall comply with the procedures and responsibilities for materials testing according to the Department's Materials I.M.s. Available on-line at: <https://www.iowadot.gov/erl/index.html>.
- e. If the Department provides any materials testing services to the Recipient, the Department will bill the Recipient for such testing services according to its normal policy as per Materials I.M. 103.

## 7. Reimbursements.

- a. Costs incurred prior to the date of the executed project funding agreement are not eligible for reimbursement. Reimbursement of eligible costs may be requested only after the project is programmed in the Regional Planning Affiliation (RPA) or Metropolitan Planning Organization (MPO) Transportation Improvement Program (TIP) and Statewide Transportation Improvement Program (STIP).
- b. The Recipient will be initially responsible for all project costs. After costs have been incurred, the Recipient shall submit to the Department periodic itemized claims for reimbursement for eligible project costs. Requests for reimbursement shall be made at least semi-annually but not more than bi-weekly.
- c. To ensure proper accounting of costs, reimbursement requests for costs incurred prior to June 30 shall be submitted to the Department by August 1, if possible, but no later than August 15.
- d. Reimbursement claims shall include a certification that all eligible project costs, for which reimbursement is requested, have been reviewed by an official or governing board of the Recipient, are reasonable and proper, have been paid in full, and were completed in substantial compliance with the terms of this agreement.
- e. The Department will reimburse the Recipient for properly documented and certified claims for eligible project costs. The Department may withhold up to 5% of the total funds available for the project. Reimbursement will be made either by State warrant or by crediting other accounts from which payment was initially made. If, upon final review or audit selected by the Administering Office, the Department determines the Recipient has been overpaid, the Recipient shall reimburse the overpaid amount to the Department. After the final review is complete and after the Recipient has provided all required paperwork, the Department will release the funds withheld.
- f. The total funds collected by the Recipient for this project shall not exceed the total project costs. The total funds collected shall include any funds received including but not limited to: Federal funds, state funds, any special assessments made by the Recipient (exclusive of any associated interest or penalties) pursuant to Iowa Code Chapter 384 (cities) or Chapter 311 (counties), proceeds from the sale of excess right-of-way, and any other revenues generated by the project. The total project costs shall include all costs that can be directly attributed to the project. In the event that the total funds collected by the Recipient do exceed the total project costs, the Recipient shall either:
  - i. in the case of special assessments, refund to the assessed property owners the excess special assessments collected (including interest and penalties associated with the amount of the excess), or
  - ii. refund to the Department all funds collected in excess of the total project costs (including interest and penalties associated with the amount of the excess) within 60 days of the receipt of any excess funds.

## **8. Project Close-out.**

- a. Acceptance of the completed construction shall be with the concurrence of the Department. Within 30 days of completion of construction or other activities authorized by this agreement, the Recipient shall provide written notification to the Department. The Recipient shall follow and request a final review, in accordance with the procedures in I.M. 6.110, Final Review, Audit, and Close-out Procedures for Federal-aid, Federal-aid Swap, and Farm-to-Market Projects. Failure to comply with the procedures may result in loss of funds and the ability to let future projects through the Department; reimbursed funds shall be returned and a possible suspension may be placed on the Recipient from receiving funds from the Department on future projects until the Recipient has demonstrated responsible management of funds on roadway projects.
- b. For construction projects, the Recipient shall provide a certification by a professional engineer, architect, or landscape architect as applicable, licensed in the State of Iowa, indicating the construction was completed in substantial compliance with the project plans and specifications.
- c. Final reimbursement of funds shall be made only after the Department accepts the project as complete and the Department has approved the emissions summary report submitted by the Recipient after completion of the project.
- d. The Recipient shall maintain all books, documents, papers, accounting records, reports, and other evidence pertaining to costs incurred for the project. The Recipient shall also make this documentation available at all reasonable times for review by the Department. Copies of this documentation shall be furnished by the Recipient if requested. Such documentation shall be retained for at least 3 years from the date of the Department's signature of the Department's Final Payment Form (Form 830436) or the bottom part of the Certificate of Completion and Final Acceptance of Agreement Work (Form 640003).