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# Preliminary Plan/Information Development

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## A. General

Prior to initiating design of a project, several elements need to be investigated in order to prevent a redesign after the first submittal to the jurisdiction and the subsequent rejection of that submittal.

One of the first elements to determine is whether the project being designed is a public improvement or a private contract. A public improvement involves construction work under control of a governmental entity that is paid for in whole or part by governmental funds. It may be vertical infrastructure, which includes buildings and all appurtenant structures, utilities, incidental street improvements, sidewalks, site development, trails, and parking facilities. Or it may be horizontal infrastructure, which includes street, bridge, culvert, and utility work not defined as vertical infrastructure. Formal definitions and further information can be found on the [Iowa DOT's website](#).

Further information and requirements related to public contracts may be found in the following Iowa Code sections:

- Publication requirements: 362.3
- General Obligation bonding: 384.23 - 384.36
- Special Assessments: 384.37 - 384.67
- Iowa Bidders Preference: 73.1 - 73.2; 73A.21(4)
- Engineering Documents: 542B.16
- Contract Letting Procedures: 26.1 - 26.15, 314.1, 384.103
- Sales Tax Exemption: 423.3
- Surety Bonds, Retainage, Payment: 573.1 - 573.28

The private contract work can involve facility design that ultimately will be transferred to the jurisdiction and thus must meet the requirements of the jurisdiction, or facility design that must meet the requirements of the jurisdiction but will remain a private facility.

## B. Bidding Public Improvements

For public improvement contracts involving estimated construction costs over the bid threshold values, either established according to Chapter 314.1 (2) of the Iowa Code or the jurisdiction's requirements or on those private contracts required by the jurisdiction, a licensed engineer in the State of Iowa must certify the construction plans and specifications. Additional information can be found on the [Iowa DOT's website](#).

If the jurisdiction is going to be the contracting authority and formal bids are required, the plans and specifications must be completed and ready for the jurisdiction to meet specific timing. The jurisdiction's governing body must approve the plans and specifications at a public hearing if the project's estimated costs exceed the bid threshold and advertise the proposed public improvement. The advertisement includes posting a public notice to bidders no less than 13 and not more than 45 days before the date of filing bids in a relevant contractor plan room service with statewide circulation, in a relevant construction lead generating service with statewide circulation, and on an internet site sponsored by either the jurisdiction or a statewide association that represents governmental entities. These timeframes may impact the document submittal and review process if

specific dates must be met. Formal procedures for opening bids should be established in consultation with the city attorney.

In general, the plans and specifications will be developed for a project identifying specific materials and processes to accomplish the work. The SUDAS Specifications allow the contractor to choose some materials unless the jurisdiction has limited that ability. Other contracts include bidding specific alternates. This allows the jurisdiction to select a particular material or process based on a predetermined method of analysis. The elements to be used in the analysis should be identified within the special provisions of the contract as a means of minimizing controversy.

Some contracts may be set up to have a base bid with a series of bid alternates. This is handled in the project by listing the alternates as separate work items. If this process is used, the project special provisions should identify how the bid alternates will be considered for contract award.

### C. Specific Jurisdictional Requirements

As a part of initiating a project that will be submitted to a jurisdiction for review/approval, it is important to ascertain if the jurisdiction has special requirements, such as:

- Supplemental information/requirements for the SUDAS Design and Specifications Manuals?
- Any local jurisdiction master plan?
- Who is the jurisdiction's contact for this project?
- Specific design software or a specific version of the software?
- Specific layer designations for the electronic plans?
- Are 3-D plans required and what should the submittals include?
- Specific legend requirements to be used on the construction plans?
- Specific requirements for survey data collection?
- Specific plan sheet designations and plan organization requirements (i.e. colored plans, sheet size, etc.)?
- Specific requirements for vertical and horizontal scale on the construction plans?
- Specific construction plan submittal requirements, such as number of printed sets and media type?
- Submittal and review process?
- Specific products to be used or prohibited?
- Specific review/approval process if a new technology is proposed?
- If not stipulated in the supplemental information, how far should utility services extend beyond the right-of-way line?
- Are manholes required where private storm sewers are connected to the public storm sewer system?
- Minimum width requirements for permanent utility easements or a specific form for the easement?
- Requirements for a permanent easement for access to and maintenance of fire hydrants on a private fire line?
- Permitting authority from the Iowa DNR for sanitary sewer and water main construction projects? If so, do you have special permit forms?
- Specific information/criteria needed on the as-built plan?
- Criteria for changes to plans and submittal of variances to design elements?

Other elements that are specific to the type of project may need to be determined. One method to get the needed information is to schedule a pre-project planning meeting with the jurisdiction staff.