2.10 PRECONSTRUCTION

2.11 PRECONSTRUCTION CONFERENCE

After award of the contract and prior to starting work on the project, a meeting between the contractor's and project engineer's staff is generally conducted to discuss project requirements and administrative details. The items for discussion at the meeting and scheduling of the meeting will depend on the type and complexity of the project and the contractor's familiarity of Iowa DOT's procedures.

Discussion Items
The project engineer must consider the type of work, the experience of the contractor, and complexity of the project to determine the appropriate items for discussion.

Many contractors are experienced in working with Iowa DOT specifications and contract requirements. In these instances, the need for discussing administrative requirements and procedures in a meeting format may not be necessary, and may be accomplished by the use of a preconstruction questionnaire.

A comprehensive list of topics that may be discussed at preconstruction meetings or included in a preconstruction questionnaire is included at the end of this section. The guideline includes topics that may not be necessary or applicable to all contracts.

Scheduling the Meeting
Preconstruction meetings may be scheduled anytime after the award of the contract. Often times, the meetings are scheduled well in advance of the time that the work will start in order to allow for coordination of utilities, work of other governmental agencies or other construction contracts. While these meetings are productive in discussing the schedule of the project, key project personnel that will be directly involved with the project may not be available. Therefore, the opportunity to discuss critical quality issues between the project personnel that will have primary responsibility for the work does not occur.

Therefore, preconstruction meetings for projects that do not require detailed coordination efforts with other entities may be held on the project site just before the work begins. These meetings shall include the contractor and inspection personnel that will be involved in the project.

For complex projects that do require advanced coordination of the intended schedule, an earlier meeting should be held that would involve other appropriate people. These earlier meetings should focus on the planning efforts needed to achieve the intended schedule.

List of Discussion Topics

Administrative Details (May be addressed by preconstruction questionnaire)

A. Contract Modifications

Before commencing any work not covered by the contract, the contractor and the engineer must agree on the price or prices to be paid for the work. Extra work performed before this agreement cannot be considered for payment. The basis of payment for the cost of extra work follows four general categories:

- Contract unit prices

- Agreed unit prices
- Lump sum
- Force account

On force account work, the contractor is required to record labor, equipment and material furnished on a “Statement of Force Account” (Form 181213). The form, which is prepared in duplicate, shall be signed by the inspector and contractor’s representative at the end of each day’s work. Both the contractor and inspector will retain a copy.

Article 1109.11, “Disputed Claims for Extra Compensations”, details requirements for submitting contractor claims. When contractors deem that extra compensation is due for work or materials not covered by their contract, they are required to notify the Engineer in writing before work begins on which the claim is based. The prior notice allows the Engineer an opportunity to evaluate the issue and address possible changes in the design when appropriate. The Engineer is to respond in writing to the contractor’s claim.

B. Contract Documents

Contractors will see that copies of plans, specifications, and special provisions are available at all times to their representatives on the project.

Plan revisions will be mailed to the contractor as soon as they are issued. Contractors will be responsible for keeping their field representatives informed and supplied with such revisions. If contractors feel such revisions require extra work, they will immediately advise the project engineer.

C. Wage Rates (if applicable)

All wages paid must conform to wage and hour provisions prescribed for the contract. Crafts must be listed exactly as shown in the wage decision. Crafts not listed but needed shall be requested by the contractor through the project engineer. Required payrolls must be submitted weekly and within seven days after the last day covered by the payroll.

Prime contractor shall collect, sign, and submit all payrolls of approved subcontractors, as a group, to the project engineer.

Project engineer shall withhold progress estimates if payrolls are more than two weeks behind schedule.

D. Postings

Contractor shall be responsible for erecting and maintaining required postings as outlined in *Construction Manual 2.21 and 2.22.*

E. Materials

If contractors want payment for stockpiled materials that have been fabricated for the project, they should provide a list of the types, quantity, and estimated cost of material expected to be stockpiled. For payment, refer to *Construction Manual 2.51.*

The Source of Materials form furnished to the contractor by the Office of Contracts is to be submitted to the project engineer, no later than the preconstruction conference. The project engineer is to forward a copy of the form to the District Materials Engineer.

It is suggested that contractors submit a list of the certified technicians that will be working on the project. This will allow the project engineer an opportunity to verify that the certifications are current.

F. Subcontracting

On all contracts, prime contractors must submit their subcontract requests to the Office of Contracts on a “Subcontract Request and Approval” (Form 830231). Prime contractor is responsible for EEO and minimum wage compliance by all subcontractors in addition to fulfilling terms of the contract. For subcontract requests and requirements, refer to *Construction Manual 2.25*.

G. Project Supervision

Prime contractor shall submit in writing, to the project engineer, the name of an authorized representative on the project. Representative will be empowered to coordinate with all operations of subcontractors and negotiate with the engineer any questions concerning extra work, including extra work performed by a subcontractor. If the prime contractor wishes, this representative may be a subcontractor’s employee that is present when work on the project is being performed.

H. Weekly Report of Working Days

During the contract period, the project engineer will prepare and furnish the contractor with a “Weekly Report of Working Days” (Form 830238) showing working days charged that week. Objections to days charged must be submitted in writing to the project engineer within 10 calendar days after the receipt of the report. Objections based on delays due to unavailability of materials should be accompanied by copies of orders placed, acceptance of orders, and promised dates of delivery. Engineer will respond to the objection, indicating acceptance of the claim or reasons for rejection.

I. Right of Way

All parties are reminded that highway right-of-way adjoins private property. Any infringement or trespassing upon such private property could cause damage that would become a liability to the person or organization involved. Maintaining good relations with the public is also important.

J. Safety

Contractor must comply with provisions of the Federal and State Occupational Safety and Health Acts. Contractors are referred to *Specification 1107.07* regarding safety responsibilities on construction projects and *Construction Manual 12.03* regarding railroad company policies and agreements, if applicable.

K. Water Pollution

The contractor's plan and schedule for control of water pollution shall be submitted to the project engineer. Storm water discharge requirements, if applicable, should be discussed. Refer to *Specification 2602.03 and Construction Manual 10.30.*

L. Payment to Contractor

Contractor may request intermediate progress payments to be made on either a monthly or bi-weekly interval. Measurement of quantities may be based on contract quantities by a written Plan Quantity Agreement (*Specification 1109.01*).

Project Details

On many projects it may be necessary for the project engineer to prepare and present an enlarged plan or map for showing location, special areas of concern, right of way restrictions, and staging.

Specific project information to be discussed includes:

- Anticipated work starting dates
- Staging schedule (*Specifications 1108.02I or 1110*)
- Signing and barricade responsibilities
  - State/county responsibilities (*Specification 1107.09A*)
  - Contractor responsibilities (*Specification 1107.09B*)
  - Contractor's work plan, submitted if traffic to be maintained through construction areas (*Specification 1107.09B8*)
- Temporary Primary Road Haul Roads (*Specification 1105.13 and Construction Manual 2.12*)
- Construction staking requirements
- Discussion of items to be subcontracted and names of subcontractors. Commercially useful function of DBE subcontractors, suppliers, and manufacturers should also be discussed. (*Construction Manual 2.25*)
- Equipment to be used – Contractor should identify equipment with greater than legal axle loads that is to be moved across bridges or pavements that will remain in place. Equipment with greater than legal axle loads (*Specification 2001.01 and Construction Manual 3.40*) must be either loaded on an appropriate trailer or specifically exempted. Requests for exemptions will be analyzed on a case-by-case basis by the Office of Construction.
- Special notes on plans, proposals, and special provisions
- Environmentally sensitive areas, including wetlands, mitigation areas and historical sites
- Pre-concreting conferences
- Value engineering incentive proposals submitted by the contractor (*Specification 1105.15 and Construction Manual 2.36*)

Utilities and Law Enforcement Attendance

At preconstruction meetings, attendance of utilities and law enforcement personnel could be highly beneficial to all concerned. The project engineer should expend extra effort to assure attendance and open communication with utilities and appropriate law enforcement.

Relocation of utilities is of extreme interest to all concerned in the progress of the project. Meeting with individual utility companies prior to the preconstruction meeting to discuss their schedule for relocation is recommended. The appropriate time for this meeting to be most effective will depend on project specific circumstances (i.e. start date, letting date, extent of relocations required etc.) For safe control of traffic, the ability to discuss traffic control with both contractors and law enforcement could be highly beneficial. Highway Patrol, sheriff, or police should be invited to attend preconstruction meetings when appropriate. Highway Patrol can be contacted through the Highway Patrol district office having jurisdiction over the area where the project is located. Communication and coordination with enforcement personnel regarding work zone staging changes is helpful in improving project safety.

It is beneficial to discuss utilities relocation, project staging and/or traffic control early in the meeting before more detailed and time consuming construction matters are discussed.

2.12 HAUL ROADS

Temporary primary haul roads are required for hauling materials over any secondary public road or city street from any source for the materials and purposes listed below:

- Soil for embankments or shouldering
- Sand, gravel, and crushed stone for base and subbase courses
- Roadway paving aggregates prior to mixing
- Granular surfacing and backfill
- Mixed asphalt and portland cement concrete, for paving, transported from mixing site to the site of work
- Salvaged material being hauled off the project to a processing or disposal site

Temporary primary haul roads are not required if:

- The contract quantity is less than 4500 Mg (5000 tons).
- The road is serving primarily as access to a regularly operated commercial source. In this case, a haul route will not be designated as it is considered a commercial truck route. This is discussed in *Specification 1105.13.*
- Hauling material that is still in the stage of being processed by the supplier. For example, a haul road would not be designated for hauling aggregate from a quarry to a washing plant.
- Hauling processed material to a commercially operated plant. For example, a haul road would not be designated for hauling aggregate from a quarry or pit to a permanently operated concrete ready-mix plant. An exception is when the material is hauled from a source very seldom or never used by the commercially operated plant. A haul road would be designated from that material source.

Temporary primary road detours can be used as haul roads without a haul road designation. However, if detour is removed while the road is still being used as a haul road, a haul road designation would then be necessary.

By specification, contractor is required to identify:

1. Source of materials

2. Most reasonable and practical route

3. Approximate distance to plant or point of usage for the material involved

If such information is not furnished within 21 calendar days after approval of the award, the project engineer has the right to establish the haul road route without increased compensation to the contractor.

Designation Policy
Department will consider only haul routes that are practical, feasible, and structurally adequate for use as a haul road. If a route is designated, other than the route submitted by the contractor, haul distance in excess of the route selected by the contractor will be paid for provided the contractor's route is one that could be approved. If the requested haul road is posted as an embargoed road and/or includes a structurally deficient structure, payment for out-of-distance hauling is not appropriate. The contractor shall also designate the return route for empty trucks if the return route is a granular surfaced road.

Contractor may make their own arrangements with county or city officials for haul routes other than the one designated. Department requires a copy of such agreements and will not erect any temporary signs on non-designated routes or be responsible for any maintenance or restoration costs.

Project engineer is responsible for giving written notice, to appropriate county or city officials, identifying when haul road will be activated for use and when haul road no longer is required. The Department’s responsibility for a haul route begins when activated by a project engineer and ends when deactivated by a project engineer.

Every effort should be made to get haul roads designated prior to their use. When this is not possible, after submission and before designation, contractor has the right to use any road. In this case, the situation will be explained to appropriate city or county officials and their written or verbal approval obtained to use the routes until acted upon by the Department. Temporary signing, if required, however, will not be erected until haul road has been designated.

After haul road has been designated, contractor shall use haul roads when hauling material for the project. Returning empty trucks may operate on any hard surfaced road. Returning empty trucks may operate on granular surfaced roads only when such roads are designated as return routes.

Haul roads will be designated for hauling processed material to the work. Processed material is defined as material that is ready for use by the contractor such as in an asphalt or concrete mix, material for stabilized shoulders, etc. "Work" is defined as the project site or a plant site set up specifically for a project.

Haul roads will be designated for hauling mixed material such as hot mix asphalt, concrete paving mix, granular subbase, etc., from the plant to project. The plant can be either commercially operated or a temporary plant set up for a specific project.

Establishment of Haul Road

A. Preliminary

After contracts are awarded, the project engineer obtains haul road information submitted by the contractor. The project engineer shall consult with state and local jurisdictions as to whether the road selected by the contractor is capable of

carrying the additional traffic and whether it is the most reasonable and practical. Structural limitations are reasons for not using the requested route. Whenever a contractor's request is changed, an explanation will be given.

The project engineer will also consult with the contractor and their materials suppliers to be sure that no last minute changes are made to their specified material sources or plant site locations. An attempt should be made to make the initial designation final, so as to minimize paperwork for all concerned.

After a haul road has been determined, the area maintenance manager (AMM) should be consulted relative to signing. Ordinarily, traffic stops should conform with those established by the governing jurisdiction because of their familiarity with their system and local needs. Keep in mind that safety of the traveling public should always be considered when determining which signs shall or shall not be placed or changed. There will be times that a heavily traveled secondary road should be given preference as to right-of-way, even though our haul roads are temporarily a part of the primary road system. Normally on haul routes, signing modifications would be limited to issuance of stop and yield signing along the route.

B. Designation Request

After all haul road information has been assembled, the project engineer will prepare a request for a haul road designation and forward it to the Construction Engineer. The request should include the following:

Written description of the proposed haul road, including distances to the nearest tenth of a mile.

Map or maps showing the location of material sources, plant sites, haul roads, haul routes, and project location. County maps should be ½ inch per mile scale and cut to 8 ½ x 11 inch size when possible. If city or town maps are not available, it may be necessary for the project engineer to prepare their own.

A tabulation of the miles of various types of surface that make up the haul road. Breakdown should be as follows:

- Gravel or stone

- Flexible base, effective depth 200 mm (8 inches) or more

- Flexible base, effective depth less than 200 mm (8 inches)

- Portland cement concrete

- Not surfaced

This information may be included in haul road description or shown on the maps.

A description and location of stop signs affecting haul road traffic. Stop signs not changed should carry the notation "Same as Present." Changes in existing stop signs on or along haul road should be noted. It is helpful if stop sign locations are shown on the map, indicating present signs and those to be established.

Speed limit recommendations when different than existing or posted speed limits.

The date haul road will be activated as a temporary primary road haul road. Normally this date would be when the contractor expects to start using haul roads. At no time will haul road be activated before April 1 or after November 15, without notification to the contracting authority.

Designation request must be received in the Office of Construction at least 10 days prior to its proposed use.

Prompt action by field personnel on projects with early starting dates will assist in getting haul roads designated as needed.

C. Notification

The Office of Construction will send a copy of the approved staff action designating/revoking a haul road to the project engineer with a copy sent to the DCE. The project engineer is responsible for notifying the contractor and affected counties and cities by furnishing them a copy of the approved staff action form.

D. Signing

Upon receipt of the approved staff action, the project engineer will make arrangements with maintenance for erection of temporary haul road signing and any special control devices for improving safety. Newly erected stop signs should be flagged.

Placement of "Stop Ahead" signs is the responsibility of the county. As previously stated, no temporary haul road signing should be done prior to designation.

Pre-Use Survey
A pre-use survey should be completed before the road is put into use as a temporary primary haul road. The project engineer organizes this survey to be conducted by the project engineer and county or city officials.

Pre-use survey will show general condition of designated haul road as well as any possible trouble spots. This survey may consist of photographs, measurements, documentation, and tape recordings. Records may show: random crack surveys, notations of distorted or deteriorated surfaces, random road widths, crown deviations, frost boils, or bad bridge conditions. Locations of any or all of these should always be shown.

If needed, pre-use and post-use filming will be arranged by the project engineer *(Policies and Procedures Manual 500.13).*

All condition survey records, pre-use and post-use, shall be retained until an agreement is reached with the original road authority and costs have been paid.

Haul Road Maintenance - Restoration
Maintenance of a haul road will be under the supervision of the project engineer. Arrangements for this maintenance should be made with either the contractor, road authority (county or city), or AMM. All haul road costs must be covered by a Change Order. Payments to the contractor for work in connection with the haul road should be

included with project progress estimates. Payments to county, city, or AMM are by Change Order with external vouchers also required for payments to outside agencies. This procedure is explained in *Policies and Procedures Manual 500.13.*

Fugitive Dust

"Fugitive Dust" is defined as that dust which drifts beyond the lot line of property on which dust is raised (for example, beyond the ROW line). Fugitive dust must be controlled when it creates a nuisance. Whoever is responsible for raising dust is responsible for controlling it. A nuisance must bother a person. Dust drifting onto a vacant lot or pasture may not be a nuisance, unless wash is hanging out or there are animals on pasture that react adversely to the dust. If dust drifts onto buildings or property occupied by people, we'd better assume it will create a nuisance.

If the Iowa Department of Transportation designates a haul road or return route over a gravel county road, we are responsible only for dust in excess of that caused by ordinary traffic.

A. Policy

Control dust if, in your judgment, a nuisance is created by dust. If there are existing areas of dust control (for example in front of farm homes), maintain this with water, calcium chloride, or bitumen; whichever is most appropriate. If some homes have no dust control, but you think it advisable, initiate it. Consultation with county or city officials is also advisable before any action is initiated.

B. Payment

Payment for control of fugitive dust must be by Change Order and can be issued to:

1. County
2. Prime contractor
3. Area Maintenance Manager

When possible, arrangements should be made with the county for controlling fugitive dust. If this is not practical or possible, work should be done by the contractor. Only as a last resort should dust control be done by DOT Maintenance.

Specification 1107.07 requires the contractor to control fugitive dust raised on the project or in contractor's plant area. Contractor is to be paid for watering construction areas adjacent to primary and interstate roads on which traffic is maintained.

Winter Suspension of Haul Road Use

When it becomes apparent that work on a project will be suspended for winter and designated haul roads for that project will be needed the following spring, the project engineer shall initiate revoking procedures using the following guidelines.

A. Post-Use Survey

When it is determined that revocation of a haul road will be required, the project engineer will so advise the county or city by letter and invite them on a review of the haul road to determine restoration work needed prior to revocation. This review should be made early enough to allow sufficient time to complete necessary restoration work before work is shutdown for the winter. An agreement should be reached regarding any changes in temporary signing.

B. Restoration

Restoration work should be in accordance with an agreement between the project engineer and county or city. If there is no agreement, haul road should be restored to a condition capable of carrying normal city or county traffic through the winter.

C. Signing

Signing changes should be carried out as per the agreement with a city or county. If no agreement was made, signing shall be restored to the condition that existed before designation.

D. Costs

Estimated haul road costs to date will be included with this revocation request. Final revocation will include all costs associated with the haul road.

E. Revocation

When revocation is approved, the project engineer will advise the city or county that all maintenance including snow removal is now returned to their responsibility.

F. Re-designation

When contractor is ready to resume work in the spring, the haul road shall be re-designated following essentially the same procedures outlined under designation requests and pre-use survey.

Revocation

A. Condition Survey

When it has been determined that haul road will no longer be needed, a condition survey will be made as soon as possible for comparison with pre-use survey. The survey will be done by the project engineer and county or city engineer for the purpose of determining if any rehabilitation work is necessary and establishing an agreement as to the cost.

B. Revocation Procedure

When a haul road will no longer be needed for the project for which it was designated, the designation shall be revoked. The project engineer will send the Construction Engineer a written request for revocation of temporary primary haul road designation. Request should include county, project number, and contractor associated with the haul road being revoked. All haul road designations no longer needed shall be removed within 3 weeks or less after the last day of use as a haul road.

Temporary signing shall be removed as soon as a haul road is no longer needed.

Haul road costs will be tabulated from the Office of Construction copy of the approved Change Order.

Haul Road Reimbursement Procedure

At the present time, FHWA participation in haul road costs is not being requested.

- Contractor Costs

  Haul road maintenance or restoration work done by the contractor should be on a force account basis. A copy of the force account record provides an excellent record of cost justification and will be maintained with project records.
- County or City Costs

  Haul road restoration or maintenance work done by a county or city should also be on a force account basis. Force account sheets should be maintained with project records. Payment to county or city is by external voucher with an approved Change Order attached as the authorizing document.
- DOT Maintenance Costs

  Costs for erecting and removing signs and any other maintenance haul road costs should be substantiated by force account sheets maintained in the project file.

Control of Fugitive Dust on Local Roads that are not Designated Haul Roads
Iowa Code Section 313.4 allows the Department to:

"...expend moneys from the fund for dust control on a secondary road or municipal street when there is a notable increase in traffic on the secondary road or municipal street due to closure of a road by the department for purposes of establishing, constructing, or maintaining a primary road."

This provision is intended to apply only to situations where roads are temporarily closed and not roads that are permanently closed due to a constructed primary road (i.e. limited access roadway). Also, payment for dust control is not allowed for roads that experience an increase in traffic for reasons other than the closure of a road. The intent of the legislation is to pay for the dust control only and not for the labor, equipment or materials for any preparation work.

The project engineer shall invite representatives of local jurisdictions to the preconstruction conference for projects that will involve a temporary road closure. The impacts of the road closure on other roads are to be discussed and plans shall be made

for addressing dust on affected roads before the closures are implemented. The project engineer and the representatives of local jurisdictions shall agree to the route(s) and the costs for the dust control before the dust control is applied. The agreement may be modified after a closure is made, but before the dust control is applied.

The project engineer shall issue a Change Order to the local jurisdiction documenting the agreement on the route(s) for dust control. The representative of the local jurisdiction will determine the extent, timing and frequency of applications needed on the roads that have been agreed to, and will arrange for the dust control to be performed. The local jurisdiction will provide a bill for the agreed costs to the project engineer. The project engineer will process an external voucher for the work.

2.13 STREAM CROSSINGS

Permanent Structures - "Iowa Department of Natural Resources Notification of Completion of Construction" (DNR Form 37)
When a permanent structure is to be constructed on a stream with a drainage area of 260 sq km (100 square miles) in rural areas and over 5.2 sq km (2 square miles) in urban areas, the DNR requires a permit to build the structure. The requirements are noted in the Iowa Administrative Code, Environmental Protection [567], Chapter 71, 567-71.1. The permit is obtained by the Office of Bridges & Structures and issued to the Iowa Department of Transportation. The permit will also cover a temporary stream crossing needed during bridge construction.

The DNR sends a "Notification of Completion of Construction" card (DNR Form 37) with approval permit to the Office of Bridges and Structures. A copy of the card and permit are forwarded to the project engineer and DCE. When the structure is completed, the project engineer should complete their copy of the "Notification of Completion of Construction" card (DNR Form 37) and return it to the Office of Bridges and Structures, who will complete and submit the original form to the Iowa DNR. The project engineer should retain a copy in the project file.

A sample of DNR Form 37 is shown in *Appendix 2-2*.

Temporary Stream Crossings
A temporary stream crossing should also be reviewed by the DOT Office of Location and Environment to determine if an existing Section 404 permit issued by the U.S. Army Corp of Engineers covers the work or if a new permit must be obtained. Refer to Construction Manual 10.40.

The requirements for Temporary Stream Crossings are specified in Section 2547, Temporary Stream Access, in the Standard Specifications. Temporary stream crossings and causeways shall be constructed in accordance with Standard Road Plan RL-16. Note that RL-16 identified the types of materials that are permitted to be used to construct temporary stream crossings and causeways and those materials DO NOT include soils.

2.14 WATER REGISTRATION AND PERMIT

Any use of water which is a minor nonrecurring use, including highway construction and maintenance, shall not require a permit. In lieu of a permit, this use may be registered with the Environmental Protection Agency, Department of Natural Resources. Registrations usually extend for up to one year and may be extended by re-registration and re-permitting.

For any construction project requiring water amounting to 94.6 kL (25,000 gallons) or more per day, a "Registration of Minor, Nonrecurring Use of Water" (DNR Form 20) must be completed. An exception is made if the source is a city water supply; the Mississippi, Missouri, or Big Sioux Rivers; or the Des Moines River bordering Missouri.

The contractor shall complete and submit the "Registration of Minor, Nonrecurring Use of Water" form (DNR Form 20) and a project location map directly to the Iowa DNR at the address listed on top of the form. Samples of a completed form and location map are in *Appendix 2-3*. There is no application fee. The contractor shall provide a copy of the completed form to the project engineer.

Daily records or documentation of water usage do not need to be kept.

Duplicate copies of "Registration of Minor, Nonrecurring Use of Water" (DNR Form 20) can be made from blank sample in *Appendix 2-3*.

2.15 WORKING & SHOP DRAWING - SUBMITTAL & REVIEW

Specification 1105.03 Working & Shop Drawings was added to the Specifications effective with the October 16, 2007 GS-01013. This Specification was developed to bring submittal and review requirements for working and shop drawings together in one section of the Specifications.

This Specification identifies the contractual requirements for submittal and review of working and shop drawings including identification of the primary review office. All submittals of working & shop drawings for review by the Office of Bridges & Structures are to be sent to the Office of Bridges & Structures to the attention of the Working & Shop Drawing Coordinator. In addition, an Excel spreadsheet was developed which provides additional guidance information on work type, Specification Article, and distribution of approved documents. This spreadsheet is available at the following web site addresses under “Structures”.

~~http://www.dot.state.ia.us/construction/index.htm~~ http://www.iowa.dot.gov/construction/index.htm
or
http://dotnet/construct/construct_body_index2.asp.

Working and shop drawing signature requirements are clarified in the following.

1. In the case of the contractor and their fabricator; working or shop drawing submittals do not need to be signed by a licensed Engineer if they are prepared from the information provided in the plans without any changes and the contract documents (ie: plans, specifications, etc.) do not state preparation must be by a licensed Engineer. If the working/shop drawing preparer proposes design changes in their submittal, that would require them to have the submittal prepared and signed by a licensed Engineer.

2. In the case of the reviewer who will approve the working/shop drawings; the same as above would apply. Also note that the review and approval does not relieve the submitter/contractor from responsibility as to the overall correctness of the submittal as stated in Article 1105.03.