



Project Development

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Local Systems

Iowa Department of Transportation



Project Development Take Aways

- Communication – call, email, talk to us!
- Use TPMS for communication, submittals
- Tag Joe and Christy in all correspondence

Project Development Take Aways

- Instructional Memorandums to Local Public Agencies (I.M.s)
- Read/understand/use the I.M. Checklists in preparing your submittals!
- Use I.M. 3.010 for submittal dates – call us if you cannot make a deadline.

4 Key Stages in Project Development

- ✓ Programming/Activation
- ✓ Design criteria
- ✓ Check plans
- ✓ Final plans and contract items



Project Programming/Activation

- **Counties – HBP** - County Five Year Program (CFYP)
- **Cities/Counties - STBGP** – STIP
- **Counties – FM** – County Five Year Program (CFYP)
- **Activation** – TPMS Development



Design Guidelines

New Rural Construction or Complete Reconstruction

- Design Aids Tables (Aids) – IM 3.210
 - Use to determine initial design parameters
 - Values below those in the Aids table will be considered on a project-by-project basis if explanation is provided
- AASHTO Guidelines Tables (Guides)- IM 3.210
 - Use if Aids Table design values cannot be met
 - Design exception is required if Guidelines Table values cannot be met

Design Guidelines

New Construction or Complete Reconstruction, Urban

- Statewide Urban Design and Specifications (SUDAS) Chapter 5 Roadway Design
 - Section 5C-1 Geometric Design Tables provides design element values based on classification, land use, and design speed
 - Use “Preferred” tables to determine initial design values; “Acceptable” tables may be used if explanation is provided
 - Design exception is needed if “Acceptable” values cannot be met



Design Guidelines

Resurfacing, Restoration, or Rehabilitation (3R) Projects

- 3R Tables for Rural Collectors and Urban Arterials and Collectors – IM 3.220
 - Rural Table design values based on project impact and design volume ADT
 - Urban Table design values based on roadway classification and number of lanes
 - 7 Safety Considerations must be addressed for all 3R projects (including urban projects)
 - Design exception is needed for values below those in the 3R table

Design Guidelines

All Highway Projects

■ Additional Information

- IM 3.230 Traffic Barriers (Guardrail & Bridge Rail) – SWAP project funds can be used.

- IM 3.260 Design Exception Process – use and document if needed

Design Guidelines

Bicycle and Pedestrian Facilities

- AASHTO Guide for the Design of Bicycle Facilities
 - Chapter 12 in both DOT Design Manual and SUDAS Urban Design Standards, contain the same guidance
 - Plans should include signing and pavement markings per MUTCD Part 9 “Traffic Control for Bicycle Facilities”
 - Be aware of ADA requirements affecting shared use facilities
- Accessibility Exceptions Certification
 - Required if the AASHTO design values are not met
 - Certification Form 517118 must be prepared and submitted
 - Include supporting documentation as appropriate

Items not required for FM/SWAP Projects

- **Preliminary Plans** – LPA may request
 - **Hydraulic Review** (Bridge projects)
LPA/LS staff may request
 - **Structural Review** (Bridge projects)
Non standard bridges – LPA/LS staff may request

Right of Way

- Follow Local Systems Instructional Memorandum 3.600 Right of Way Acquisition
- State Code adopts the Uniform Act
 - Property owner contacts, notifications, negotiations, acquisitions, etc. remain unchanged
- Costs can be used as match funds for City Bridge-SWAP
- The Office of ROW is still available for assistance
- LPA Coordinators remain unchanged
- Office of ROW file reviews will still occur

LOCAL PUBLIC AGENCY (LPA) COORDINATORS

Rick W. Skinner

LPA production coordinator

Office: 515-239-1749

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Joe Guckert

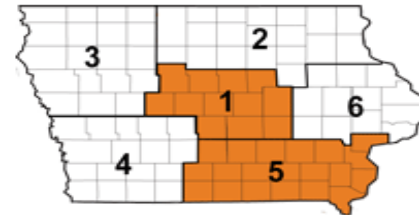
LPA coordinator

Districts 1 and 5

Office: 515-239-1976

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Patti J. Simons

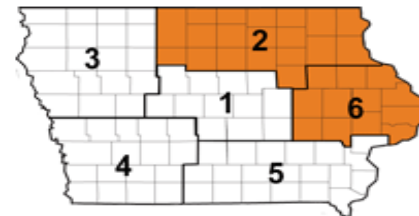
LPA coordinator

Districts 2 and 6

Office: 515-239-1562

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Steve Chapman

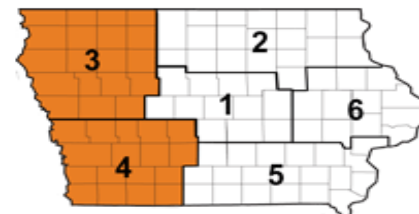
LPA coordinator

Districts 3 and 4

Office: 515-239-1157

Cell: 515-290-2857

Steven.Chapman@iowadot.us



Right of Way

- If requesting reimbursement

- Submit eligibility requests to Local Systems Field Engineer
- Submit documentation similar to Federal-aid process
 - Description of the parcels to be acquired that includes the property owner's name, address, and parcel number for each parcel
 - Plan sheets showing the parcels to be acquired, identified by property owner name or parcel numbers
 - A cost estimate that includes both a total cost and a breakdown of the acquisition and any related incidental costs for each parcel
- Reimbursement request procedures are unchanged

Check Plans

■ Purpose

- Obtain an acceptable set of plans for letting through the Iowa DOT
- Check Plans should be **100% complete**

■ Guidelines

- Both check and final plans are required for all projects let through the DOT
- DOT specifications must be used
 - Limited opportunity for editing
 - Bid items

Check Plans

- Should be **100% COMPLETE**
- Are they **BIDDABLE** and **CONSTRUCTABLE**?
- **BETTER PLANS = BETTER BIDS**



Check Plans

- Preparation – All Projects

- Apply IM 3.700 Check and Final Plans

- Use I.M. 3.700 Attachment B (Check and Final Plan Checklist) in plan development

- DOT plan format

- STIP Description and location

- Letting date

- SWAP program amounts

- Current Design Details and Road Standards

- Sheet Index

- Environmental Clearances



Check Plans (Cont'd)

- Preparation – All Projects

- I.M. 3.700 Attachment B items

- Certified plant inspection
 - Bid items: Codes, estimate reference information, method of measurement/basis of payment, etc.
 - Typical sections (existing and proposed)
 - Salvaged items
 - Tabulations
 - Permits: ACOE, Floodplain, NPDES storm water



Check plans

- Topsoil and NPDES Permits
 - If a general NPDES permit is required, project must provide for at least four inches (4") of topsoil on "non-surfaced" disturbed areas
 - Individual NPDES permits may have other requirements
 - Default strip and placement thicknesses are included in specs for the available bid items:
 - Strip/Salvage/Spread: common, easily applied
 - Furnish/Spread: contractor-provided
 - Spread: from existing stockpile
 - Review the site - bid items for temporary erosion control

Check Plans (Cont'd)

- Preparation – All Projects
 - I.M. 3.700 Attachment B items
 - Pollution Prevention Plan (PPP)
 - Pavement removals
 - Existing and proposed right-of-way
 - Vertical profile data
 - Traffic control
 - Utilities
 - Sidewalks



Check plans

- Pedestrian Facilities During Construction
 - Pedestrian traffic must be addressed in the project traffic control plan and/or staging
 - Design activities include:
 - Determine the current level of accessibility
 - Evaluate the project impact on pedestrian facilities
 - Develop pedestrian accommodations to provide the best accessibility practical during all stages of work
 - Consider local input where additional needs should be addressed (transit stops, schools, medical facilities, public facilities, etc.)

Check plans

- Pedestrian Facilities During Construction (cont.)
 - Consider the following options:
 - Keep facility open with “on-site detour”; safety and accessibility must be addressed
 - Close facility and provide “off-site detour” consistent with accessibility present in the route being closed
 - Provide alternate means (e.g. accessible shuttles or other forms of assistance)
 - Close the pedestrian facility
 - Temporary pedestrian facilities must be firm, stable, and slip resistant.
 - For more information, see DOT Design Manual Ch. 12, Section 12A-4

Check plans

■ Preparation – Structural Projects

- Apply IM 3.500 Check and Final Bridge or Culvert Plans
- Use I.M. 3.500 Attachment A (Bridge or Culvert Supplementary Checklist)
 - Standard Design – DOT Bridge/Culvert Standards
 - Non-Standard Design – modified standards or custom details
 - Bridge fund participation limits, shop drawings, etc.
 - Centerline section, situation plan, sounding data, etc.
 - Existing Structure: materials, disposal, etc.

Check Plans

■ Submittal

- All projects per IM 3.700 Check and Final Plans, including
 - Transmittal letter
 - Check or final plans
 - Detailed project cost estimate

- Structure projects per IM 3.500 Check and Final Bridge or Culvert Plans

Check Plans



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■ Review

□ Local Systems Staff

- Current bid items
- Acceptable estimate reference information notes
- Date-sensitive details (standards, typicals, etc.)

□ LPA revises and resubmits plans as necessary

Final Plan Submittal

■ SUBMITTAL ITEMS:

- Final Plan set (fully signed)
- FM Worksheet (if applicable)
- Cost estimate
- Project Development Certification form (signed)
- ACOE permit (bridge projects)
- Cover letter - contract time, tied projects
- Special Provisions (if applicable)
- Public Interest Finding (if applicable)
- Bid Item Application

Final Plan Submittal

- Should be 100% complete and address all comments from check plan review
- What do we check for?
 - Check plan comments
 - Plan quantities = Bid Item Application
 - STIP and CFYP programming
 - FM worksheet
 - Public Interest Finding



Final Plan Submittal

- Project Development Certificate (PDC) - required
 - Confirms letting process may begin for project
 - LPA certifies railroad, utility, work on primary roadway, environmental, and right of way clearances
 - Office of Right of Way review may be needed
 - Fully executed PDC must be on file with Office of Contract before advertising for bids
 - For more information, see IM 5.050, Project Development Certification Instructions

Final Plan Submittal

- US Army Corps of Engineers (COE) Permit
- IDNR Floodplain Permit– as needed
 - If COE 404/401 and/or IDNR permit is required, a copy must be on file with DOT for use by bidders
 - Submit with check plans if possible, final plans if necessary; otherwise, PIF is required
- National Pollution Discharge Elimination System (NPDES) Permit – as needed
 - If individual NPDES permit is required, a copy must be on file with DOT for use by bidders
 - Need is determined by Iowa DNR
 - e.g. Outstanding Iowa Waters locations

Final Plan Submittal

- Special Provisions (SP) – as needed
 - Used to modify existing or create new specifications
 - SP number is assigned in Bid Item Application
 - Must address five areas of interest
 - Description of work
 - Material requirements
 - Construction methods/procedures
 - Method of measurement
 - Basis of Payment
 - For more information:
www.iowadot.gov/specifications/requirements/RequirementsforSubmittingSpecialProvisions.pdf

Final Plan Submittal

- Public Interest Finding (PIF) – as needed
 - Grants an exception for an established policy or rule
 - May only be used for certain conditions
 - Condition may be temporary (e.g. required project clearance is missing) or permanent (e.g. proprietary items are specified)
 - Temporary conditions must be resolved before project will be advertised for letting
 - For more information, see IM 5.060 Public Interest Findings

Final Plan Submittal

- Bid Item Application (BIA) File - required
 - Web-based process for submitting bid item data for letting
 - LPAs or their consultants must have an **Enterprise A&A** account using their exact email address used in TPMS
 - BIA file is created on-line and automatically retrieved by the Office of Contracts
 - For more information, IM 3.720 Electronic Bid Item Information

Final Plan Submittal

- Railroad Agreement – as needed
 - Railroad agreement is required when work is performed within a railroad's right-of-way
 - Submit when available, with final plans if necessary; otherwise, PIF is required
 - Office of Contracts uses information to assemble railroad data for bidders
 - Railroad insurance and/or flaggers bid items may or may not apply
 - For more information, see IM 3.670 Work on Railroad Right-of-Way



Project Turn In/Bid Phase

If all final plan submittal items are deemed acceptable, these materials are submitted to the Office of Contract for the requested IDOT letting.

Bid X Questions

- Answer questions in timely manner
- Reply all to all tagged in the email
- Better information = better bids



FM Granular Surfacing Contracts

I.M. 2.100 - Farm-To-Market Program

Applicable to projects using FM funds only

1. The County sends a request to our office
 - Written request to have a local letting
 - Cost estimate and general description of the project
 - FM Worksheet



FM Granular Surfacing Contracts

- Request is reviewed - forwarded to Office of Local Systems - Ames.
- The Office of Local Systems verifies that the County meets the current FM borrowing restrictions and the guidelines in I.M. 2.100.
- The Office of Local Systems informs our office and the County of its decision.

FM Granular Surfacing Contracts

- The County submits plans and letting information (notice to bidders, bidding proposal)
- Review and provide comments.
- Final plans and bidding documents - final approval.
- Bulletin Reporting Form (Form 650013 (Word)) to the Office of Contracts



FM Granular Surfacing Contracts

- Post letting, submit bid tabulations and request concurrence.
- 10. County - signed contract to our office and Office of Local Systems.

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Questions?



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