Design Process Outline (DPO)
(Abbreviations may be found in the DPO Index)

<table>
<thead>
<tr>
<th>Project No:</th>
<th>Control No:</th>
<th>Letting Date:</th>
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<td>Project Location:</td>
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<td>Designer:</td>
<td>Roadway Design Unit Head:</td>
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**PHASE 1: PROGRAM (5100)**

**PHASE 2: PLANNING (5200)**

**INITIAL PROJECT REVIEW AND SETUP** – Payroll Activity 5200 (Clarity Task Code 5282)

**Request Information:**
- Traffic Counts, Design Year Traffic Data

**Information Supplied:**
- Signed Highway Improvement Programming Request (Form DR-73)
- Bridge Data (Bridge Task Code 5241)
- Bridge Hydraulic Study (Bridge Task Code 5246)
- Planning Environmental Review (P&PD Task Code 5247)
- Wetland Delineation (P&PD Task Code 5264)
- T&E Habitat Evaluation (P&PD Task Code 5273)
- Planning Traffic Engineering Recommendations (Traffic Task Code 5256)
- Planning Pavement Determination (M&R Task Code 5258)
- Initial Purpose & Need Statement (get from Planning Document)
- Initial Project Description (get from Planning Document)
- Project Planning Document (part of signed Form DR-73)
- As-Built Plans
- Survey Base Plans (Task Code 5235)
- Aerial Survey (Task Code 5237)
- Ortho Photo (Task Code 5244)
- Clarity Schedule (Program Management Section Task Code 5254)
- Cultural Resource Identification and Evaluation (Historic Project Review) (P&PD Task Code 5268)
- Lighting Appraisal (Task Code 5274)
- Preliminary Erosion Control & Landscape Review (Roadside Stabilization Unit (RSU) Task Code 5278)
- Planning Project Considerations (if available)

**Action:**
- Meet with the RD Survey Coordinator to determine the survey needs of the project
For projects without survey, the RD Unit Head will obtain the as-built plans and transmit them to the Highway Total Station Coordinator in Geodetic Surveys to create the project alignment.

Determine the Design Standard and Typical Section using Nebraska Minimum Design Standards and the RDM.

Review FEMA Flood Plain Maps.

Complete Form DR-76, Roadway Design – Principal Controlling Design Criteria, and route for signatures.

After Form DR-76 has been returned with signatures, request any design exceptions or relaxations that may be needed. A request for a relaxation of the Minimum Design Standards to the Board of Public Roads Classifications and Standards should be presented as a PowerPoint slide show. Requests to the Secretary of the Board to place your project on the agenda shall be submitted at least two weeks before the meeting and will include the PowerPoint slide show (to comply with the Open Meeting Act) and a time estimate for the presentation.

Generate Initial Footprint (IFP) (Task Code 5238).

Planning Alignment Design for Bridge (Task Code 5240).

RD Unit Head review Clarity schedule.

Conduct Project Coordination Meeting 20 (Exhibit A) (Task Code 5290).

**Submittals:**
- Send Initial Footprint (IFP) to P&PD.
- Send Planning Alignment Design to Bridge.
- Send notice to Clarity that Activity 5200 is done.

**PHASE 3: DESIGN (5300)**

**PRELIMINARY ROADWAY DESIGN** - Payroll Activity 5300 (Clarity Task Code 5350)

**Request Information:**
- Earthwork Balance Factor from the DE.
- Accident Report (May be in OnBase). Request Sheet for Accident Summary (Form DR-312): Rate Analysis, Collision Diagram, & Spot Map (3 yr.). This report is for NDOT use only & shall not be shared with the general public. (Traffic Task Code 5256).
- District/City review of property access during construction (ADA compliant?) (RDM Chapter Sixteen).
- Soils information for MS4 Stormwater Treatment Facility (STF) sites.

**Information Supplied:**
- Engineering Review or Initial Project Review and Setup - Meet with the author of this document if/as needed.
- Approved Design Relaxations/Exceptions.
- Correspondence File.
- As-Built Plans.
- Roadview Explorer.
- GeoPak Files.
- Bridge Data Sheet (TS&L) (Bridge Task Code 5346).
• Right-of-Way Ownership Plans (R.O.W. Task Code 5348)
• Roadside Stabilization Appraisals (P&P Roadside Stabilization Unit (RSU) Task Code 5362)
• Stormwater Treatment Form A – “Project Evaluation” (from RSU)

Action:
• Conduct Construction Meeting (Exhibit T) (Task Code 5313)
• e-mail the Railroad Liaison Engineer with the Project Control Number, Project Number, Designer, and Designer’s Phone Number
• Complete the “Public Meeting Checklist” (Exhibit C)
• Fill out the preliminary Waterway Permit Data Sheet (Form DR-290) and justification for impacted wetlands and/or channel changes (why avoidance was not possible) and place in OnBase. Send notice to the Environmental Program Manager in P&PD (Task Code 5353)
• Conduct Project Coordination Meeting 30 (Exhibit A) (Task Code 5315)
• Conduct Alternative Design Analysis (Task Code 5366)
• Complete the Waterway Permit Data Sheet (Form DR-290)
• Conduct Meeting A (CADD Coordination Policy, Version 8 http://www.nebraskatransportation.org/roadway-design/downloads.htm)
• Check for Right-of-Way Permits on CICS
• Design vertical and horizontal alignments
• Request Bridge Special Investigations (e.g. allowable CBC parapet height, is bridge rail NCHRP 350/MASH compliant)
• Design intersections/frontage roads; check geometry with Traffic
• Perform preliminary earthwork computations
• Delineate and compute drainage areas
• Determine Q values and size drainage structures
• Preliminary design of culverts, storm sewers, special ditches and median drains
• Present access control recommendations to Access Control Group (Exhibit D)
• Notify Hwy. Survey Coordinator if Right-of-Way Survey is needed or has been ordered
• Complete the “Erosion Control Plan-in-Hand Checklist” (Exhibit F)
• Draft Covenant Agreements - City/County: Request for Agreement (Form DR-65) (Include Stormwater Treatment Facilities (STFs) for MS4 – Maintenance of STFs, if required. See the Drainage and Erosion Control Manual (Drainage Manual), Chapter Three, Section 7.A.5).
• Constructability/Phasing Meeting (Exhibit E). Early Bridge involvement is critical
• Conduct FHWA Oversight Coordination Meeting #1 (Task Code 5382) (PODI/POCI projects only)
• Review and Complete Stormwater Treatment Form A – “Project Evaluation” (in OnBase)
• Identify all Stormwater Outfall locations and determine Priority Stormwater Outfalls, initiate Form B – “Stormwater Treatment Facilities” (See the Drainage Manual, Chapter Three, Section 5), consult RD Hydraulics Engineer as needed

April 7, 2016
• Calculate Water Quality Volume and Discharge Rate at Priority Stormwater Outfall locations (See the Drainage Manual, Chapter Three, Section 6)
• Select Stormwater Treatment Facilities (STFs) at outfall locations and complete initial design (See the Drainage Manual, Chapter Three, Section 7)
• Coordinate with Adjacent MS4 Communities concerning selection and design of Stormwater Treatment Facilities (STFs) (See the Drainage Manual, Chapter Three, Section 7.A.3)

Additional Information/Action by Others:
• Review by RD Hydraulics Engineer if a Floodway/Floodplain is near the project
• Traffic: Studies, Signals, Signing, etc.
• RD Hydraulics: Review of Stormwater Pipes, Culverts, Non-Bridge size Concrete Box Culverts and Stormwater Treatment Facilities (STFs) as requested by Roadway Designer
• P&PD: Utilities, Environmental Survey, Design Environmental Review
• RSU: Review of Form B – “Stormwater Treatment Facilities”, Pre-PIH Review (P&PD Task Code 5362)
• Railroad Liaison: Preliminary Plan Review (Railroad Liaison Task Code 5358)
• M&R: Soils Investigation
• M&R: Retaining Walls/Settlement
• Additional Survey (Form DR-150): For Hydraulic Surveys or missing items (e.g. sewers, water lines, center pivot, utilities, or to extend cross-sections or pavement shots)
• Aerial Photography - Request for Aerial Photography (Form DR-474)
• Bridge: Bridge/Bridge Hydraulics/Bridge size culverts
• R.O.W.: Relocation Concept Study (R.O.W. Task Code 5356)
• District Program Evaluation (Program Management Task Code 5327)
• District: Detour Location/ADA Access during construction (RDM Chapter Sixteen)

Reviews:
• Scope of project with RD Unit Head and Asst. Design Engr. (invite Roadway Design Engineer, DE, Environmental Program Manager, Environmental Analyst Supervisor, Roadside Stabilization Manager, and/or Railroad Liaison Engineer as required). Review Clarity schedule for content equal to scope of work to address “Scope Change Window”. The Environmental Units will determine whether or not they want to be invited to the PIH at this meeting
• Approved Pavement Determination Review (M&R Task Code 5364)
• “Design Checklist” (Exhibit B) with RD Unit Head
• RD Unit Head review and approval of preliminary Stormwater Treatment Facility (STF) design; forward Form B – “Stormwater Treatment Facilities” to the RSU
• Ditch grades and erosion control methods with the P&PD Roadside Stabilization Manager
• Sidewalk design with Traffic Engineer & Traffic Analysis Engineer; discuss crossing/signal/push button placement
• Special information from support units and other divisions
- Covenant Relinquishment Agreement (CRA) for revising (Exhibit G) (include Stormwater Treatment Facilities (STFs) for MS4 – Maintenance of STFs, if required. See the Drainage Manual, Chapter Three, Section 7.A.5)
- Design for content and quality by RD Unit Head

Submittals:
- Selected Final Alignment: Send through RD Unit Head to Photogrammetry and PDU to update survey (offsets, culvert data, & data sheets) & input file to R.O.W. Pre-design Supervisor
- Agreements: Request for Agreement (Form DR-65)
- Back-up Preliminary Roadway Design to ProjectWise
- Stormwater Treatment within MS4 Communities Form B – “Stormwater Treatment Facilities”
- Send notice that Activity 5300 is done:
  o RD Unit Head
  o RD Lighting Unit Head
  o Bridge Designer
  o DE
  o Design Plans Manager in PDU
  o P&P Roadside Stabilization Manager
  o Traffic Engineer
  o PSS Project Manager (See Exhibit I, Sheet #2)
  o Clarity

COST UPDATE #1 - Status 30 – Payroll Activity 5300 (Clarity Task Code 5368)

Action:
- Check with RD Unit Head for funding split (e.g. City or Railroad)
- Complete estimate of plan quantities:
  o Project Information Sheet (Form DR-342)
  o Project Quantity Sheet (Form DR-343)

Reviews:
- “Cost Estimate Checklist” (Exhibit H)
- Review of estimate by RD Unit Head

Submittals:
- Transmit Estimate Quantities to the Highway Estimating Unit and the Estimate Quantities & the Design Plans to the Final Plans Coordinator in Construction and receive Cost Update #1 prior to PIH (Task Code 5319)
- Send notice to Clarity that Task Code 5368 is done

PLAN-IN-HAND (PIH) – Payroll Activity 5300 (Clarity Task Code 5380)

Request Information:
- Ask the DCE whether “Construction Surveying” and “Re-establish Property Corners” will be performed by State forces or bid as part of the contract.

Information Supplied:
- Preliminary Design Plans from PDU (PDU Task Code 5354)
• Preliminary Utility Inspection (P&PD Utilities Section Task Code 5374)
• Wetland Mitigation Strategy (P&PD Environmental Section Task Code 5390)
• Bridge Borings (M&R Task Code 5372)
• Railroad Company Approval (Railroad Liaison Task Code 5384)
• Noise Report Determination (P&PD Noise & Air Unit Task Code 5386)
• Preliminary Project Agreements (Including Stormwater Treatment Facilities (STFs) for MS4 – Maintenance of STFs, if required. See the Drainage Manual, Chapter Three, Section 7.A.5)
• Preliminary Relinquishment Agreements (Including Stormwater Treatment Facilities (STFs) for MS4 – Maintenance of STFs, if required. See the Drainage Manual, Chapter Three, Section 7.A.5)

Action:
• Request that PDU plot PIH plans
• Assemble PIH plans (RDM Chapter Eleven):
  o PIH Title Sheet (include Location Map & Traffic ADT)
  o 2L Sheets
  o P & P Sheets
  o Culvert Sections
  o Typical Section
  o X-Sections
  o 2W/2A Sheets
  o Right-of-Way Ownership Plans
  o Wetland information
• Request that District Maintenance inspect the culverts on the project (send request with PIH plans transmittal)
• Complete the T&E Checklist and place in OnBase; send notice to the Technical Documents Unit in P&PD (Task Code 5395)
• Conduct in-field review with Plans-In-Hand (“Plan-In-Hand Checklist”, Exhibit J)
• Review the completed “Public Meeting Checklist” (Exhibit C) from Clarity Task 5350
• Conduct Public Information Meeting, if indicated (Exhibit C)
  o Provide PDU with information for mosaic and displays (“Guidelines for Public Meetings”, Exhibit L)
  o Provide the Communications Division Public Involvement Coordinator with completed Public Meeting Notice Worksheet (Form DR-356)
• Coordinate with P&PD Utilities Section, discuss conflicts/resolution
• Conduct Project Coordination Meeting 35 (Exhibit A) after the PIH (Task Code 5331)

Reviews:
• Project Planning Document (save all versions in OnBase)
• Design for content and quality by RD Unit Head
Submittals:
- Back-up PIH Design to ProjectWise
- Send notice activity is done to Design Plans Manager in PDU
- Send notices PIH Plans are available (Exhibit I) (Task Code 5317)
- Transmit PIH plans at least 2 weeks prior to the PIH date (Railroad personnel require 5 weeks’ notice), see “Distribution of Plans” (Exhibit I); distribute 5 weeks prior to Public Information Meeting when held concurrently w/PIH
- Place the completed “Erosion Control Plan-in-Hand Checklist” (Exhibit F) in OnBase and send notice to the P&PD Wetland Manager and Roadside Stabilization Manager
- Send notice that Form DR-290 (Waterway Permit Data Sheet) is available in OnBase to the P&PD Wetland Manager and Roadside Stabilization Manager
- Submit FAA Form 7460-1 to the Nebraska Division of Aeronautics, if required (“Airway Highway Clearances”, Exhibit R)
- Send notice to Clarity the PIH (Task Code 5380) has been conducted

SCOPE (PIH) REPORT – Payroll Activity 5300 (Clarity Task Code 5388)
(1) Combine comments/changes from PIH to one set of plans and label as PIH Set
(2) Conduct post PIH field inspection review – RD personnel office review
(3) The RD Unit Head should review the Planning Document and respond to all of the items where it is indicated that resolution will occur at the plan-in-hand.
(4) Review any changes to the project with the P&PD Environmental Program Manager
(5) Review the completed “Public Meeting Checklist” (Exhibit C) from Clarity Task 5350 for changes approved by RD Unit Head and Asst. Design Engr.
(7) Review the Scope (PIH) Report with RD Unit Head
(8) Submit the Scope (PIH) Report to OnBase and to the Asst. Design Engr. for routing
(9) Revise the routed Scope (PIH) Report as needed
(10) Confirm/Update Project Description, Purpose & Need Statement and the T&E Checklist w/RD Unit Head (save all versions in OnBase (Task Code 5396)
(11) Submit revised Scope (PIH) Report to the Asst. Design Engr. for distribution
(12) After the Scope (PIH) Report has been routed, change the date of the report to the approval date and place the Scope (PIH) Report in OnBase
(13) If applicable, request Design Relaxations/Exceptions (RDM Appendix H)

PHASE 4: ENVIRONMENTAL APPROVAL (5400)

FUNCTIONAL DESIGN – Payroll Activity 5400 (Clarity Task Code 5428)
NOTE: Send a note to inform the Design Plans Manager if this activity will not be done by PDU.

Request Information:
- Accident Studies, Request Sheet for Accident Summary (Form DR-312)
- MS4 landscaping design (if applicable) (See the Drainage Manual, Chapter Three, Section 8.A)
Information Supplied:
- Final Pavement Determination (M&R Task Code 5406)
- Final Bridge Data Sheet (Bridge Task Code 5410)
- Soils Foundation Report (M&R Task Code 5452)
- Soils, Situation, and Subgrade Report (M&R Task Code 5450)
- Lighting Layout (RD Lighting Unit Task Code 5422)
- Lighting Design (Task Code 5429)
- Lighting Comps & Specs (Task Code 5453)
- Approved 4(f) Statement (P&PD Task Code 5476)
- Final E.I.S Acceptance (P&PD Task Code 5480)
- Approved CE Documentation (P&PD Task Code 5481)
- Final E.A. Acceptance (P&PD Task Code 5482)
- Roadway Floodplain Certification (Task Code 5485)
- Bridge Floodplain Certification (Bridge Task Code 5488)
- Functional Design Plans/Prep Public Meeting (PDU Task Code 5432)

Action:
- Make changes, if needed, as the result of the Noise Report – Keep R.O.W. Design, Lighting, Traffic, Wetlands, etc. informed.
- Revise design according to Public Information Meeting (if held), the PIH inspection, and the approved Scope (PIH) Report comments
- Conduct Meeting B (CADD Coordination Policy, Version 8)
- Design details to be considered (“Design Checklist”, Exhibit B)
- Schedule a meeting with the City, Irrigation District, etc. to determine conflicts and if rehabilitation will be a part of the project
- Present access control design to Access Control Group, if needed (Exhibit D)
- Request that PDU plot Functional Plans
- Constructability/Phasing: Consider holding a meeting (Exhibit E)
- Complete MS4 Treatment STF design (See the Drainage Manual, Chapter Three, Section 8)
- MS4 Treatment STF Plan Labeling (See the Drainage Manual, Chapter Three, Section 8.D)
- Begin Writing Special Provisions

Additional Information/Action by Others:
- Traffic Engineering Review (Traffic Task Code 5464)
- Utilities
- Additional Survey (DR Form 150): For Hydraulic Surveys or missing items (e.g. water lines, center pivots, sewers, utilities, or to extend cross-sections or pavement shots)
- Request for Aerial Photography (Form DR-474)
- Bridge
- Bridge Hydraulics Unit
- R.O.W.
Reviews:
- Confirm/Update Project Description, Purpose & Need Statement and the T&E Checklist (save all versions in OnBase)
- Avoidance & Minimization Review w/P&PD Environmental Program Manager
- Covenant Relinquishment Agreement (CRA) for revising (Exhibit G) (Include Stormwater Treatment Facilities (STFs) for MS4 – Maintenance of STFs, if required. See the Drainage Manual, Chapter Three, Section 7.A.5)
- Review by RD Hydraulics Engineer if a Floodway/Floodplain is near project as needed
- “Design Checklist” (Exhibit B) with RD Unit Head
- Review of design for content and quality by RD Unit Head
- MS4 Form B – “Stormwater Treatment Facilities” review by RD Unit Head

Submittals:
- Back-up Functional Design to ProjectWise
- Send notice that Activity 5400 is done to:
  - Design Plans Manager
  - RD Unit Head
  - Traffic Engineer
  - Clarity
  - PSS Project Manager (See Exhibit I, Sheet #2)

COST UPDATE #2 - Status 40 – Payroll Activity 5400 (Clarity Task Code 5446)
Note: Cost Update #2 is only required when a Public Hearing will be held.

Action:
- Check with RD Unit Head for funding split (e.g. City or Railroad)
- Complete estimate of plan quantities:
  - Project Information Sheet (Form DR-342)
  - Project Quantity Sheet (Form DR-343)

Reviews:
- “Cost Estimate Checklist” (Exhibit H)
- RD Unit Head review of estimate

Submittals:
- Estimate to Highway Estimating (in Construction) & receive Cost Update #2
- Send notice to Clarity that Task Code 5446 is done

DESIGN PREP FOR PUBLIC HEARING & HIGHWAY COMMISSION
Payroll Activity 5400 (Clarity Task Code 5435)

Information Required Before Scheduling a Public Hearing:
- Signed Draft Environmental Impact Statement (EIS) or Environmental Assessment (EA)
- Signed City Covenant Agreement (CA) (if applicable) (Including Stormwater Treatment Facilities (STFs) for MS4 – Maintenance of STFs, if required. See the Drainage Manual, Chapter Three, Section 7.A.5)
• Signed Covenant Relinquishment Agreement (CRA) (if applicable) (Including Stormwater Treatment Facilities (STFs) for MS4 – Maintenance of STFs, if required. see the Drainage Manual, Chapter Three, Section 7.A.5)

• Noise Study (if a Noise Study was conducted)

Information Supplied:
• Aerial Photo Display
• Hearing Transcript

Action:
• Complete Public Meeting Notice Worksheet (Form DR- 356) & send to Public Hearing Officer in Communications
• RD Unit Head review/update of the project on the web (approximately every six months)
• Complete “Guidelines for Public Meetings” (Exhibit L) & give to PDU
• Prepare the Engineering Statement and the Public Hearing presentation
• Conduct Design Public Hearing Dry Run (Exhibit M) prior to scheduling Public Hearing
• Take the press release to the Public Hearing Dry Run for approval
• Request Public Hearing Officer in Communications schedule Public Hearing
• Conduct Design Public Hearing (Exhibit L)
• Prepare Highway Commission Statement (Exhibit L)
• Request that the Executive Secretary of the Highway Commission inform the local government(s) of the Highway Commission Meeting
• Notify the Roadway Design Engineer that the project is ready to present to the Highway Commissioners
• Asst. Design Engr. (or designee): present Highway Commission Statement to Highway Commission for approval

Reviews:
• Confirm/Update Project Description, Purpose & Need Statement, T&E Checklist and the Scope Document (save all versions in OnBase)
• Comments and plans from Public Information Meeting (if held) and label plans as “Public Information Meeting Plan Set”
• Transcript and consolidate comments and plans from Design Public Hearing and label plans as “Design Public Hearing Plan Set”
• Review and analyze the citizen comments received at the Public Hearing and respond to the originator of the comment (cc responses to the NEPA Project Manager and the Public Involvement Coordinator)

Submittals:
• Transmit Functional Plans (“Distribution of Plans”, Exhibit I)
• Hearing Statement
• Highway Commission Statement
• Expressway System projects: send Location Map and Expressway Map to the Executive Secretary of the Highway Commission 10 days before the Commission meeting
• Send notice that Functional Plans have been transmitted to:
  o DE
  o Traffic Engineer
  o Design Plans Manager
  o P&PD Wetlands Unit Head
  o Communication Division Public Hearing Officer

**PHASE 5: PLAN DETAILS (5500)**

**ROADWAY DESIGN DETAILS** – Payroll Activity 5500 (Clarity Task Code 5508)

**Information Required Before Beginning Roadway Design Details (Federal-Aid Projects):**

- Final EA – Finding *Of No Significant Impact* (FONSI) (*P&PD Environmental Section* Task Code 5482) (See RDM Chapter Thirteen, Section 4)
- Final EIS - *Record Of Decision* (ROD) (*P&PD Environmental Section* Task Code 5480) (RDM Chapter Thirteen, Section 4)
- Signed and approved *Categorical Exclusion* (CE) NEPA Document (RDM Chapter Thirteen, Section 4)

**Information Supplied:**

- Project Approval from *Highway Commission* and *Governor*
- Final Wetland Mitigation Plans (Task Code 5518)
- Roadside Stabilization Erosion Control Design (*P&PD Roadside Stabilization Unit* Task Code 5528)
- Pavement Determination Verification (*M&R* Task Code 5555)
- Bridge Design Details/Plans (*Bridge* Task Code 5520)
- Special Plans from Bridge (*Bridge* Task Code 5540)
- Final Bridge Plans & Specifications (*Bridge* Task Codes 5544 & 5556)

**Action:**

- Finalize design geometry, grades, and cross-sections for driveways, intersections, frontage roads, etc. (“Design Checklist”, Exhibit B)
- Finalize plans and notes for Stormwater Treatment Facilities (STFs)
- Prepare geotechnical plans (wick drains, instrumentation, etc.)
- Request seed mixtures from the *P&PD Roadside Development Unit* approximately two months prior to PS&E turn-in
- Request Special Plans from *Bridge Special Projects Unit* (Box Culverts using the *Concrete Box Culvert Request Sheet, Form DR-67*; Retaining Walls, Headwalls etc., using the *Custom Special Plan Request Sheet, Form DR-66*) approximately two months prior to PS&E turn-in (Task Code 5516)
- Request that *PDU* plot Final Design Plans for Final Design Review
- Review Bridge Plans, verify vertical clearance
- Review and Finalize the *Waterway Permit Data Sheet (Form DR-290)* for changes due to right-of-way, place in OnBase and send notice to the *Environmental Program Manager* in *P&PD* (Task Code 5591).
- Conduct FHWA Oversight Coordination Meeting #2 (Task Code 5560) (PODI/POCI projects only)
Additional Information/Action by Others:

- District Final Plan Review *(Program Management Task Code 5580)*
- P&PD: Utilities
- Additional Survey (Form DR-150): For Hydraulic Surveys or missing items (e.g. water lines, center pivot, sewer pipe, utilities, or to extend cross-sections or pavement shots)
- R.O.W.

Reviews:

- Project Description, Purpose & Need Statement, T&E Checklist and the Scope Document (save all versions in OnBase. If changes or revisions are required notify the Environmental Section Manager in P&PD immediately)
- Designer check of lighting pole locations
- Requests & changes recommended in the District Final Plan Review
- Hearing Plans, transcript, notes, and comments
- P&PD Roadside Stabilization Unit Head - Erosion control w/cross-sections and MS4 Treatment STFs *(P&PD Roadside Stabilization Unit Task Code 5572)*
- P&PD Roadside Stabilization Unit Head – Landscape Plan Review *(P&PD Roadside Stabilization Unit Task Code 5574)*
- “Earthwork Checklist” (Exhibit O)
- “Design Checklist” (Exhibit B) and Final Design Plans with RD Unit Head

Submittals:

- Send phasing plans to Traffic for use in producing traffic control plans
- Back-up roadway design to ProjectWise & Send notice Clarity Task 5508 is done to:
  - R.O.W. Design
  - Asst. Design Engr. and RD Unit Head
  - District: DCE & Project Manager
  - Design Plans Manager
  - P&PD Roadside Stabilization Unit Manager
  - Roadway Design Survey Coordinator
  - P&PD Traffic Analysis - traffic forecast needs updating
  - R.O.W. Relocations - with comment about business and home relocations
  - PSS Project Manager (See Exhibit I, Sheet #2)
  - Clarity
- Transmit early acquisition Final Design Plans to R.O.W. (when applicable)

**DESIGN DETAIL REVIEW** – Payroll Activity 5500 (Clarity Task Code 5576)

**Information Supplied:**

- Roadway Design Plans from PDU *(PDU Task Code 5532)*
- Final Landscape Design & Specifications *(P&PD Roadside Stabilization Unit Task Code 5568)*

**Request Information:**

- Request tree/stump counts from the District
Reviews:

- Design for content and quality by RD Unit Head
- Plans with RD Unit Head using “Design Checklist” (Exhibit B)
- Conduct traffic review (pavement marking plans, special plans, signals, etc.). Tell Traffic if the project has centerline and/or edge line rumble strips – this may change the type of striping specified/required on the project.
- MS4 Treatment STF labeling on Final Design Plans with RD Unit Head (See the Drainage Manual, Chapter Three, Section 8.D)

Submittals:

- Back-up Design to ProjectWise (include culvert sections)
- Design Plans to District (Task Code 5550)
- Send notice that Activity 5500 is done to:
  - Design Plans Manager
  - R.O.W. Designer
  - RD Lighting Unit Head
  - P&P Environmental Section Manager
  - P&P Utilities Engineer
  - Traffic Engineer
  - DE
  - Clarity
- Request that PDU plot Final Design Plans showing the limits of construction
- Transmit Final Design Plans ("Distribution of Plans", Exhibit I)
- Transmit asphalt surfacing areas to M&R

COST UPDATE #3 - STATUS 45 – Payroll Activity 5500 (Clarity Task Code 5584)

Information Supplied:

- Receive asphalt surfacing quantities from M&R

Action:

- Check with RD Unit Head for funding split (e.g. City or Railroad)
- Complete estimate of plan quantities:
  - Project Information Sheet (Form DR-342)
  - Project Quantity Sheet (Form DR-343)
- Update the City Financial Agreement (Request for Agreement, Form DR-65) (Include Stormwater Treatment Facilities (STFs) for MS4 – Maintenance of STFs, if required. See the Drainage Manual, Chapter Three, Section 7.A.5)

Reviews:

- “Cost Estimate Checklist” (Exhibit H)
- RD Unit Head review of estimate

Submittals:

- Estimate to Highway Estimating Unit (in Construction) & receive Cost Update #3
- Send City Financial Agreement to the DE
- Send notice to Clarity that Task Code 5584 is done
DESIGN REVIEW OF SUPPORT PROCESSES – Payroll Activity Varies (Clarity Task Code Varies)

**Reviews:**
- Agreements:
  - City/County (Include MS4 Maintenance, if required)
  - Railroad
  - Irrigation
  - NRD
- Wetlands
- Utilities
- Right-of-Way
- Geotechnical
- Phasing
- MS4 Construction Phasing (See the *Drainage Manual*, Chapter Three, Section 8.B)
- Promises
- Final Relinquishment Agreement (Exhibit G) (Include Stormwater Treatment Facilities (STFs) for MS4 – Maintenance of STFs, if required. See the *Drainage Manual*, Chapter Three, Section 7.A.5)
- Working days and verify letting date

**Action:**
- Conduct Meeting C (CADD Coordination Policy, Version 8)

**PHASE 6: R.O.W. (5600)**

**RIGHT-OF-WAY PLANS REVIEW** – Payroll Activity 5600 (Clarity Task Code 5610)

**Information Supplied:**
- Soils Foundation Review (*M&R* Task Code 5604)
- Railroad Agreements/Easements (*Railroad Liaison* Task Code 5644)
- 404 Permits (*P&PD* Task Code 5634)
- Utility Plans & Computations (*P&PD Utility Section* Task Code 5660)
- Compaction Review & Report (*M&R* Task Code 5670)

**Reviews:**
- Preliminary Right-of-Way Plans by designer and **RD Unit Head**
- The completed “Public Meeting Checklist” (Exhibit C) from Clarity Task 5350 for changes approved by the **RD Unit Head, Asst. Design Engr.**, and **Roadway Design Engr.**
- Review MS4 Treatment STF labeling on R.O.W. plans with **RD Unit Head** (See the *Drainage Manual*, Chapter Three, Section 8.D)
Action:

Additional Information/Action by Others:
- Traffic: Traffic Signal and Permanent Guide Sign Locations

Submittals:
- When requested by Railroad Liaison, add the proposed Railroad Easements to the cross-sections and then submit to the Railroad Company through Railroad Liaison Engineer

DESIGN PLANS TO UTILITY SECTION (See Exhibit Q) – Payroll Activity 5600 (Clarity Task Code 5614)

Information Supplied:

Action:
- Request that PDU plot the Utility Plans
- Contact the P&PD Utility Coordinator and discuss the project

Reviews:
- Right-of-Way Appraisal Plans

Submittals:
- Transmit the latest reproducible plans to P&PD Utility Section (Exhibit Q)
  - Send notice that Clarity Task Code 5614 is done to appropriate PSS Project Manager (See Exhibit I, Sheet #2)

PRE-APPRAISAL PUBLIC MEETING – Payroll Activity 5600 (Clarity Task Code 5620)

Information Supplied:

Action:
- Conduct Information Meeting (Pre-Appraisal), if warranted
  - Provide Public Hearing Officer in Communications with completed Public Meeting Notice Worksheet (DR Form 356)
  - Provide PDU with information for mosaic and displays (“Guidelines for Public Meetings”, Exhibit L)
- Schedule/Conduct Information Meeting (Pre-Appraisal), contact Public Hearing Officer in Communications

PHASE 7: PLAN PACKAGE (5700)

PLAN PACKAGE MODIFICATIONS – Payroll Activity 5700 (Clarity Task Code 5705)

Information Supplied:
- Roadside SWPPP Development (P&PD Environmental Section Task Code 5760)
- Final Green Sheet (P&PD Environmental Section Task Code 5740)
- Summary of Quantities & Typical Sections (M&R Task Code 5725)
- Traffic Control Plans (Traffic Task Code 5745)
Action:

- Make changes, if needed, as the result of appraisal and negotiation (Note: if the property in question is in condemnation proceedings, advise Legal)
- Make changes, if needed, as a result of utility conflicts – Keep R.O.W., Lighting, Traffic, Wetlands, etc. informed
- Conduct Project Coordination Meeting 70 (Exhibit A) (Task Code 5770)

Additional Information/Action by Others:

- Erosion Control Specification Review (P&PD Roadside Stabilization Unit Task Code 5755)

Reviews:

- Project Description, Purpose & Need Statement, T&E Checklist and the Scope Document (save all versions in OnBase. If changes or revisions are required notify the Environmental Section Manager in P&PD immediately)
- District/City review of property access during construction (ADA Compliant?) (RDM Chapter Sixteen)
- Requests/changes as a result of appraisal and negotiation
- “Design Checklist” (Exhibit B) with RD Unit Head
- Design for content and quality by RD Unit Head
- Review/Conduct rehabilitation meeting with Utilities, District, and City

Submittals:

- Send notice/submittals of design changes to parties involved:
  - R.O.W.
  - City/County
  - Lighting Unit Head
  - Traffic Engineer
  - P&PD Utilities Section
  - P&PD Wetland Unit Head
  - Railroad Liaison Engineer
  - Construction Estimating Unit Manager
  - DE
- Send plans and final surfacing areas to M&R Estimates for final asphalt surfacing computations
- Design changes to PDU (PDU Task Code 5765)

FINAL PLANS PACKAGE & REVIEW FOR P.S. & E. - Payroll Activity 5700 (Clarity Task Code 5790)

Information Supplied:

- Status of Utilities Report (P&PD Utilities Section Task Code 5735)
- Pavement Design Special Provisions (M&R Task Code 5730)
- 2-K Sheets (M&R Task Code 5720)
- Final Project Agreements (P&PD Agreements Section Task Code 5715) (Including Stormwater Treatment Facilities (STFs) for MS4 – Maintenance of STFs, if required. See the Drainage Manual, Chapter Three, Section 7.A.5)
Final Relinquishment Agreements (P&PD Agreements Section Task Code 5710) (Including Stormwater Treatment Facilities (STFs) for MS4 – Maintenance of STFs, if required. See the Drainage Manual, Chapter Three, Section 7.A.5)

Action:
- Finalize design details and computations (e.g. guardrail)
- Finalize Special Provisions and Special Prosecution & Process
- Calculate % of work on railroad right-of-way within 50 feet of the centerline of the nearest railroad track (RDM Chapter Twelve, Section 1)
- Calculate % of work on railroad right-of-way outside of the first 50 feet from the centerline of the nearest railroad track (RDM Chapter Twelve, Section 1)
- Calculate and split out quantities per Funding Group
- PS&E Forms: PS&E Required Sheet (Form DR-280), Length Sheet (Form DR-415), Grading Item Summary Sheet (Form DR-064)
- If the project includes bridge structures and/or box culverts, request that PDU list Standard Plan Number 490, “Bird Exclusion Netting”, on the title sheet
- Prepare and Submit Supplemental City Financial Agreement to DE for signatures, use PS&E quantity and unit prices (Request for Agreement, Form DR-65) (Include Stormwater Treatment Facilities (STFs) for MS4 – Maintenance of STFs, if required. See the Drainage Manual, Chapter Three, Section 7.A.5)
- Public Interest Letter (by Asst. Design Engr.) to FHWA, if applicable (submit to Deputy Director Engineering before FHWA Approval and Ads Sent Out Date, see Letting Schedule) (RDM Chapter Fifteen, Section 6)
- Assemble Special Plans (Erosion Control, Guardrail Hardware, Special Access during construction, Curb Ramps, MS4, etc.)
- Request that PDU plot the PS&E plans
- Cross-check all construction notes with the computations
- Prepare the reports for the project (After final PS&E corrections made):
  o Slope Stake
  o Blue top
  o Paving Grades
- Place the reports in OnBase under “Construction Reports” & Notify District Project Manager
- Notify the District Project Manager where to find the Temporary Erosion Control sheets in OnBase (blank sheets for the contractors use)

Reviews:
- Project Description and Scope Document
- Check Agreements (Including Stormwater Treatment Facilities (STFs) for MS4 – Maintenance of STFs, if required. See the Drainage Manual, Chapter Three, Section 7.A.5)
- PS&E Plan Package with RD Unit Head and Design Plans Manager
- “Earthwork Final Plans Checklist” (Exhibit O)

Submittals:
- Project Plan Package to PS&E
  o Send notice that Clarity Task 5790 is done to appropriate PSS Project Manager (See Exhibit I, Sheet #2)

April 7, 2016
PHASE 8: LETTING (5800)

Submittals:
- Blue-lined plans to PDU for PS&E changes (PDU Task Code 5845)
- PS&E changes to Asst. Design Engr./RD Unit Head to review/seal/sign & date
- Resubmit plans to PS&E (Task Code 5850)

PHASE 9: BEGIN CONSTRUCTION PHASE (5900)

POST LETTING SUPPORT AND PLAN REVISION

Action:
- Attend pre-construction meeting
- Make revisions, if needed, as the result of Construction recommendations
- Acquire written FHWA approval for all projects on the National Highway System and for all Federally funded projects before revisions are submitted to the Construction
- Obtain originals from the vault, make revisions to plans (RDM Chapter Eleven, Section 7)
- Revisions processed between the PS&E turn-in and the letting date must follow the revision process (RDM Chapter Eleven, Section 7) and be dated after the project is executed (approximately one month after the letting date).
- Update MS4 Form B - “Stormwater Treatment Facilities” as necessary

Submittals:
- Project Books to the District:
  - Slope Stake
  - Blue top
  - Paving Grades
- Design revisions to PDU
- Revised plans (original and revised sheets) & revision letter to Construction
PROJECT COORDINATION MEETINGS
Establish Needed Inputs, Meeting Protocol, and Documentation Guidance
(Schedule all meetings through Environ. Liaison Engr. (Julie Wells)
Roadway Design Hydraulic & Environmental Liaison Section
ACRONYMS, ABBREVIATIONS AND SYMBOLS:

CE  Categorical Exclusion (Class II Environmental Document)
CM  Coordination Meeting
DPO  Design Process Outline
EA  Environmental Assessment (Class III Environmental Document)
EDU  Environmental Documents Unit
EDUM  Environmental Documents Unit Manager
EIS  Environmental Impact Statement (Class I Environmental Document)
EPU  Environmental Permits Unit
ER  Environmental Report
IF  Initial Footprint
M&R  Materials & Research Division
NEPA  National Environmental Policy Act
PA  Programmatic Agreement
PCM  Project Coordination Meeting
PIH  Plan-In-Hand
PIP  Public Involvement Plan
PS&E  Plans, Specifications and Estimates
PSPM  Project Scheduling and Program Management
PSS  Project Scheduling System
RD  Roadway Design
RDELE  Roadway Design Environmental Liaison Engineer
ROW  Right-of-Way
RSU  Roadside Stabilization Unit
SDLSS  Scoping Documents and Location Studies Supervisor
T&E  Threatened and Endangered
TDU  Technical Documents Unit

DEFINITIONS:

NEPA Document – The NEPA document is the Environmental Document. To avoid confusion within this document, the environmental document will be referred to as the NEPA document, whether an EIS (Class I), CE (Class II), or an EA (Class III).

Environmental Documentation – Supporting environmental documentation including, but not limited to, agency correspondence, wetland permits, floodplain certifications and permits, Section 4(f) documents (park and recreational land, wildlife and waterfowl refuges, and historical sites), Section 106, threatened and endangered species documentation, and hazardous material documentation.

Refer to Work Breakdown Structure and to the Programmatic Categorical Exclusion Agreement between FHWA and NDOT dated April 2015 for definitions of project phases and Level thresholds.
**PROCESS:**

The Project Coordination Meeting structure has been designed to concur with the Work Breakdown Structure and the Programmatic Categorical Exclusion Agreement between FHWA and NDOT signed into effect April 2015. The importance of these meetings is to establish impacts and threshold levels earlier within the project to alleviate schedule changes and project delays. For threshold levels and project type examples for each level, refer to Appendix A, B and C within the Agreement.

The Project Coordination Meetings (PCM) will be scheduled and documented by the Roadway Design Environmental Liaison Engineer (RDELE). The four meetings are required for each project unless a determination is made that states a specific PCM is not required. The meetings and their occurrence throughout the life of a project is as follows:

- PCM 20 – End of Phase 2 during the Planning Phase
- PCM 30 – Beginning of Phase 3 during the Design Phase
- PCM 35 – End of Phase 3 during the Design Phase
- PCM 70 – Within Phase 7 during the Plans Package Phase

The meetings will be scheduled based on the Clarity schedule date. If Roadway Design would like to have a meeting earlier, they can request that meeting through the Roadway Design Environmental Liaison Engineer based on whether the needed information has been collected and/or completed. A meeting notice and the project schedule will be sent out approximately one to two weeks in advance to state that the necessary tasks have been completed that are listed within this guidance document. The meetings will be held the 1st and 3rd Mondays of each month between 1:00 PM and 4:00 PM, and adjusted accordingly around various holidays occurring on those days. Projects are likely to have separate meetings outside of the PCMs that will bring important stakeholders together to discuss in further detail environmental issues related to the project.

The list of “Information Needed and has been Completed/Collected” is a checklist to be utilized by Roadway Design that shows that the required information has been actually completed prior to attending the PCM. Roadway Design would also be responsible for notifying stakeholders involved when pieces of information are missing in order to attend the various meetings.
PROJECT COORDINATION MEETING 20
END OF PHASE 2 DURING THE PLANNING PHASE:

WHEN MEETING OCCURS:
- After Phase 1 Program Phase
- At the end of Phase 2 Planning Phase
- After ground survey has been completed and After Initial Footprint has been determined

INFORMATION NEEDED AND HAS BEEN COMPLETED / COLLECTED:
☐ Crash Data (Traffic)
☐ Planning Level Assessment of whether ROW acquisition may be required (RD/ROW)
☐ Planning Level Assessment of whether Permanent/Temporary Easements may be required (RD/ROW)
☐ Planning Level Assessment of whether driveways or County Roads be realigned (RD)
☐ Pavement Determination (M&R)
☐ Bridge Determination (Bridge)
☐ Presence Determination of EJ/LEP Population (HR)
☐ Ground Survey completed (Roadway Design)
☐ Layout Initial Footprint (Roadway Design)
☐ Impacts determined within Initial Footprint (Roadway/Environmental)
☐ Planning Environmental Review (Environmental)
☐ Preliminary Bridge TS&L to Roadway Design (Bridge)
☐ Preliminary NEPA Level Determination (Environmental)
☐ Preliminary Public Involvement Plan (Communication)
☐ DR-73 Planning Document (Program Management)
  ☐ Floodplain Present
  ☐ Floodway Present
  ☐ Curb and Flume Construction – sufficient shoulder width to construct
  ☐ Culverts Replacement, Removal, Construction, Extensions (Y or N?)
  ☐ Grading Beyond the shoulder hinge point likely?
  ☐ ROW Needed
☐ MS4 Form A (RSU)
☐ T&E Checklist (RD)

PURPOSE OF MEETING:
☐ Review the DR-73 Planning Document to determine if any changes are needed.
☐ Review Project Length via Google Earth – Compare Initial Footprint to Environmental Resources.
☐ Identify Environmentally Sensitive Areas. Review environmental resources and determine if additional field surveys are required.
☐ Answer questions needed to update the Planning Environmental Review.
☐ Discuss design and environmental requirements that could impact the NEPA document and/or environmental documentation, project scope, project schedule, and project design.
☐ Confirm preliminary environmental class/level (CE – Level 1, 2, or 3 / EA / EIS).
☐ PSPM Coordinator will determine if the schedule needs to be adjusted based on impacts.
☐ Based on initial footprint, determine if wetland mitigation will be necessary. If so, will it be mitigated at a bank or mitigated on site. If on-site mitigation is required, then site selection and design would need to be completed.
WHAT TO PROVIDE AT MEETING:
☐ Planning Document (OnBase – RD)
☐ Initial Footprint covering project length (Google Earth .kmz file – RD)
☐ Environmental Resources (Google Earth .kmz file - EDU)

ATTENDEES:
☐ Bridge Management Engineer
☐ Bridge Hydraulics Engineer
☐ District Representative
☐ Environmental Documents Unit Coordinator
☐ Environmental Documents Unit Manager
☐ Environmental Permits Unit Coordinator
☐ Environmental Permits Unit Manager
☐ Environmental Section Manager (Optional)
☐ Hazmat, Air & Noise Coordinator
☐ Project Scheduling Program Management Coordinator
☐ Public Involvement Coordinator
☐ Roadway Design Engineer Unit Head
☐ Roadway Design Engineer/Designer
☐ Roadway Design Environmental Liaison Engineer
☐ Roadway Design Hydraulics Engineer
☐ Roadway Design Section Head (Optional)
☐ Roadside Stabilization Unit Erosion Control Designer
☐ Section 106/Historic Coordinator
☐ Technical Documents Unit Manager
☐ Threatened & Endangered Species Biologist
Project Coordination Meeting 20 (Clarity Task 5290)  
(Conduct at the End of Phase 2, Planning Phase)

Attendees:

☐ Bridge Management Engineer __________________________
☐ Bridge Hydraulics Engineer ____________________________
☐ District Representative ________________________________
☐ Environmental Documents Unit Coordinator ______________
☐ Environmental Documents Unit Manager __________________
☐ Environmental Permits Unit Coordinator __________________
☐ Environmental Permits Unit Manager ______________________
☐ Environmental Section Manager (Optional) ________________
☐ Hazmat, Air & Noise Coordinator __________________________
☐ Project Scheduling Program Management Coordinator ________
☐ Public Involvement Coordinator __________________________
☐ Roadway Design Engineer Unit Head ______________________
☐ Roadway Design Engineer/Designer ________________________
☐ Roadway Design Environmental Liaison Engineer ____________
☐ Roadway Design Hydraulics Engineer ______________________
☐ Roadway Design Section Head (Optional) _________________
☐ Roadside Stabilization Unit Erosion Control Designer ________
☐ Section 106/Historic Coordinator __________________________
☐ Technical Documents Unit Manager ________________________
☐ Threatened & Endangered Species Biologist ________________

Information Provided:

☐ Planning Document (OnBase and Summary Provided by RDHEL)
☐ Initial Footprint covering Project Length (Google Earth .kmz file – RD)
☐ Environmental Resources (Google Earth .kmz file – EDU)

Meeting Agenda:

☐ Review the DR-73 Planning Report to determine if any changes are needed.
☐ Review Project Length via Google Earth – Compare Initial Footprint to Environmental Resources.
☐ Identify environmentally sensitive areas. Review environmental resources and determine if additional field surveys are required.
☐ Answer questions needed to update Planning Environmental Review.
☐ Discuss design and environmental requirements that could impact the NEPA document and/or environmental documentation, project scope, project schedule, and project design.
☐ Confirm preliminary environmental class.

☐ PSPM Coordinator will determine if the schedule needs to be adjusted based on impacts.

☐ Based on initial footprint, determine if wetland mitigation will be necessary. If so, will it be mitigated at a bank or mitigated on site. If on-site mitigation is required, then site selection and design would need to be completed.

Summarize Threshold Impacts (Refer to Threshold Summary Spreadsheet for Levels):
☐ Highway Capacity Changes
☐ Right-of-Way Needs
☐ National Wildlife and Scenic River or National Recreational River
☐ Floodplain / Floodway
☐ Section 404 Wetland / Streams (Impacts, Mitigation Required, Permit Type, Onsite / Off-site)
☐ Section 9 – Coast Guard Permit
☐ Threatened & Endangered Species
☐ Section 106 (Historic)
☐ Hazmat, Noise & Air
☐ Section 4f (Park, recreational lands, wildlife, waterfowl refuges, historic sites)
☐ Traffic Disruptions (Temporary Road, Detour or Ramp Closure)
☐ Property Access
☐ Environmental Justice – Minority / Low Income Populations
☐ Public Involvement

Summary of Project Description:

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Action Items:

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PROJECT COORDINATION MEETING 30
PHASE 3 PRIOR TO PLAN-IN-HAND VISIT:

WHEN MEETING OCCURS:
- After Phase 2 and following the Construction Meeting
- After design has been refined based on environmental resources and determined impacts.
- Before PIH Plans have been distributed to the District.
- Before completing the PIH visit.

INFORMATION NEEDED AND HAS BEEN COMPLETED / COLLECTED:
- Bridge Borings (M&R)
  - Preliminary Geo-Tech Finding (Driven Pile vs Drilled Shaft)
- Pavement Determination Review confirmed with Cores and FWD (M&R)
- Bridge Determination Review (Bridge)
- Environmental Surveys (T&E, Section 106, Hazmat)
- Wetland delineation (EPU)
- Construction Meeting Completed (RD)
- Preliminary Waterway Permit Data Sheet DR290 (RD)
- Design Environmental Review (EDU)
- Plan in Hand Plans (RD)
- Days of Detours, Total Construction Time, Access, Temporary Roads, Access Crossings (RD)

PURPOSE OF MEETING:
- Review preliminary environmental impacts and resources
- NEPA Class Determination (Level I, II, III, EA, EIS)
- Review project length via aerials (Google Earth .kmz files)
- Compare Project Footprint to Locations of Environmental Resources

WHAT TO PROVIDE AT MEETING:
- Pre-PIH Design covering project length (Google Earth .kmz file – RD)
- Preliminary T&E Checklist (OnBase – RD)
- Environmental Resources (Google Earth .kmz file - EDU)
  - Floodplain Present
  - Floodway Present
  - Curb and Flume Construction – sufficient shoulder width to construct
  - Culverts Replacement, Removal, Construction, Extensions (Y or N?)
  - Grading Beyond the shoulder hinge point likely?
  - ROW Needed

ATTENDEES:
- Bridge Management Engineer
- Bridge Hydraulics Engineer
- District Representative
- Roadway Design Section Head (Optional)
- Roadway Design Engineer Unit Head
- Roadway Design Engineer/Designer
- Roadway Design Hydraulics Engineer
- Roadway Design Environmental Liaison Engineer
- Project Scheduling Program Management Coordinator
- Public Involvement Coordinator
☐ Environmental Section Manager (Optional)
☐ Environmental Permits Unit Manager
☐ Environmental Permits Unit Coordinator
☐ Environmental Documents Unit Manager
☐ Environmental Documents Unit Coordinator
☐ Roadside Stabilization Unit Erosion Control Designer
☐ Threatened & Endangered Species Biologist
☐ Hazmat, Air & Noise Coordinator
☐ Section 106/Historic Coordinator
# Project Coordination Meeting 30 (Clarity Task 5315)

*(Conduct at the Beginning of Phase 3 Prior to Plan-in-Hand, Design Phase)*

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## Attendees:
- ☐ Bridge Management Engineer
- ☐ Bridge Hydraulics Engineer
- ☐ District Representative
- ☐ Environmental Documents Unit Coordinator
- ☐ Environmental Documents Unit Manager
- ☐ Environmental Permits Unit Coordinator
- ☐ Environmental Permits Unit Manager
- ☐ Environmental Section Manager (Optional)
- ☐ Hazmat, Air & Noise Coordinator
- ☐ Project Scheduling Program Management Coordinator
- ☐ Public Involvement Coordinator
- ☐ Roadway Design Engineer Unit Head
- ☐ Roadway Design Engineer/Designer
- ☐ Roadway Design Environmental Liaison Engineer
- ☐ Roadway Design Hydraulics Engineer
- ☐ Roadway Design Section Head (Optional)
- ☐ Roadside Stabilization Unit Erosion Control Designer
- ☐ Section 106/Historic Coordinator
- ☐ Technical Documents Unit Manager
- ☐ Threatened & Endangered Species Biologist

## Information Provided:
- ☐ Pre-PIH Design covering project length (Google Earth .kmz file – RD)
- ☐ Preliminary T&E Checklist (OnBase – RD)
- ☐ Preliminary Construction Activity Checklist (OnBase – RD)
- ☐ Environmental Resources (Google Earth .kmz file - EDU)
- ☐ Floodplain Present
- ☐ Floodway Present
- ☐ Curb and Flume Construction – sufficient shoulder width to construct
- ☐ Culverts Replacement, Removal, Construction, Extensions (Y or N?)
- ☐ Grading Beyond the shoulder hinge point likely?
- ☐ ROW Needed

## Meeting Agenda:
- ☐ Review preliminary environmental impacts and resources
- ☐ NEPA Class Determination (Level I, II, III, EA, EIS)
- ☐ Review project length via aerials (Google Earth .kmz files)
- ☐ Compare Project Footprint to Locations of Environmental Resources
Exhibit A
April 7, 2016

Summarize Threshold Impacts (Refer to Threshold Summary Spreadsheet for Levels):
☐ Highway Capacity Changes _______________________________________________________
☐ Right-of-Way Needs _____________________________________________________________
☐ National Wildlife and Scenic River or National Recreational River ___________________
☐ Floodplain / Floodway _________________________________________________________
☐ Section 404 Wetland / Streams (Impacts, Mitigation Required, Permit Type, Onsite / Off-site) __________
☐ Section 9 – Coast Guard Permit _______________________________________________
☐ Threatened & Endangered Species ______________________________________________
☐ Section 106 (Historic) _______________________________________________________
☐ Hazmat, Noise & Air __________________________________________________________
☐ Section 4f (Park, recreational lands, wildlife, waterfowl refuges, historic sites) __________
☐ Traffic Disruptions (Temporary Road, Detour or Ramp Closure) ______________________
☐ Property Access ______________________________________________________________
☐ Environmental Justice – Minority / Low Income Populations _________________________
☐ Public Involvement ____________________________________________________________

Summary of Project Description:
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Action Items:
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PROJECT COORDINATION MEETING 35
PHASE 3 AT END OF DESIGN PHASE:

WHEN MEETING OCCURS:
☐ At the end of Phase 3 Design Phase
☐ After the PIH Report (Final Scope Report) has been distributed.
☐ Prior to Public Involvement Action in Phase 4

INFORMATION NEEDED AND HAS BEEN COMPLETED / COLLECTED:
☐ Protected Population Evaluation (HR)
☐ District Program Evaluation – Cumulative Impacts (PSPM)
☐ Final Public Involvement Plan (Communications)
☐ Final Pavement Determination (M&R)
☐ Final Scope Report (RD)
☐ Final Bridge Datasheet (Bridge)
☐ Required Contract Provisions (CE Section 20)

PURPOSE OF MEETING:
☐ Confirm that there are no Cumulative Impacts (NEPA)??
☐ Review Draft CE - unofficially
☐ Review Final Scope Report

WHAT TO PROVIDE AT MEETING:
☐ Updated DR290 (Falcon/OnBase – RD)
☐ Updated LOCs (Google .kmz file – RD)
☐ Final Scope Report (Falcon/OnBase – RD)
☐ Updated Public Involvement Plan (Communications)
☐ Updated T&E Checklist (OnBase – RD)

ATTENDEES:
☐ Bridge Management Engineer
☐ Bridge Hydraulics Engineer
☐ District Representative
☐ Roadway Design Section Head (Optional)
☐ Roadway Design Engineer Unit Head
☐ Roadway Design Engineer/Designer
☐ Roadway Design Hydraulics Engineer
☐ Roadway Design Environmental Liaison Engineer
☐ Project Scheduling Program Management Coordinator
☐ Public Involvement Coordinator
☐ Environmental Section Manager (Optional)
☐ Environmental Permits Unit Manager
☐ Environmental Permits Unit Coordinator
☐ Environmental Documents Unit Manager
☐ Environmental Documents Unit Coordinator
☐ Roadside Stabilization Unit Erosion Control Designer
☐ Threatened & Endangered Species Biologist
☐ Hazmat, Air & Noise Coordinator
☐ Section 106/Historic Coordinator
**Project Coordination Meeting 35** (Clarity Task 5331)  
*Conduct at the End of Phase 3 After Plan-in-Hand, Design Phase*  

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**Attendees:**
- [ ] Bridge Management Engineer
- [ ] Bridge Hydraulics Engineer
- [ ] District Representative
- [ ] Environmental Documents Unit Coordinator
- [ ] Environmental Documents Unit Manager
- [ ] Environmental Permits Unit Coordinator
- [ ] Environmental Permits Unit Manager
- [ ] Environmental Section Manager (Optional)
- [ ] Hazmat, Air & Noise Coordinator
- [ ] Project Scheduling Program Management Coordinator
- [ ] Public Involvement Coordinator
- [ ] Roadway Design Engineer Unit Head
- [ ] Roadway Design Engineer/Designer
- [ ] Roadway Design Environmental Liaison Engineer
- [ ] Roadway Design Hydraulics Engineer
- [ ] Roadway Design Section Head (Optional)
- [ ] Roadside Stabilization Unit Erosion Control Designer
- [ ] Section 106/Historic Coordinator
- [ ] Technical Documents Unit Manager
- [ ] Threatened & Endangered Species Biologist

**Information Provided:**
- [ ] Final DR290 (Falcon/OnBase)
- [ ] Final LOCs (Google .kmz file – RD)
- [ ] Final Scope Report (OnBase)
- [ ] Updated Public Involvement Plan (Communications)
- [ ] Updated T&E Checklist (OnBase – RD)

**Meeting Agenda:**
- [ ] Confirm that there are no Cumulative Impacts (NEPA)???
- [ ] Review Draft CE - unofficially
- [ ] Review Final Scope Report
### Summarize Threshold Impacts (Refer to Threshold Summary Spreadsheet for Levels):

<table>
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<tr>
<th>Topic</th>
<th>Description</th>
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<td>Highway Capacity Changes</td>
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<td>Right-of-Way Needs</td>
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### Summary of Project Description:

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### Action Items:

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PROJECT COORDINATION MEETING 70
PHASE 7 CE VALIDATION:

WHEN MEETING OCCURS:
☐ After ROW Acquisition
☐ Designer/Engineer has incorporated right-of-way changes into the plans.
☐ Prior to PS&E Turn-in

INFORMATION NEEDED AND HAS BEEN COMPLETED / COLLECTED:
☐ ROW Acquisition
☐ Changes from ROW negotiation(s) and acquisition(s) have been incorporated into plans.
☐ Verify that the questions on the Approved NEPA Document were answered correctly

PURPOSE OF MEETING:
☐ Review plans to ensure that changes to project due to ROW negotiation and acquisition have been incorporated.
☐ Confirm that restricted areas are denoted on plans before PS&E Turn-in (e.g. detours, ROW, staging areas, access, protected areas, and concrete cleanout)
☐ Verify that Plans, Special Provisions, and NEPA document reflect environmental commitments made in the Green Sheet.
☐ To review Final Scoping Report and confirm the plans reflect the final project scope
☐ Assist Environmental Section in completing “Environmental Certification”
  ☐ Confirm that project beginning and ending and limits of construction are consistent with the NEPA document
  ☐ To verify that the 404 permit/floodplain permit is correct and confirm that the 2W sheets have wetland delineation layers shown.
  ☐ Verify Structure numbers match NEPA document
  ☐ Directives for nighttime or daytime construction / lighting, historic properties (if any), tree preservation
  ☐ Easements are shown
  ☐ Confirm threatened and endangered species commitments are in the NEPA document
  ☐ Confirm permits needed and received (404, Stormwater, Floodplain)
  ☐ Confirm that NEPA commitments made it into the Green Sheet

WHAT TO PROVIDE AT MEETING:
☐ PS&E Plans (OnBase – RD)
☐ Signed NEPA Document (OnBase – EPU)
☐ Green Sheet (OnBase – EDU)

ATTENDEES:
☐ Roadway Design Section Head (Optional)
☐ Roadway Design Engineer Unit Head
☐ Roadway Design Engineer/Designer
☐ Roadway Design Environmental Liaison Engineer
☐ Environmental Section Manager (Optional)
☐ Environmental Permits Unit Manager
☐ Environmental Permits Unit – Coordinator
☐ Environmental Documents Unit Manager
☐ Environmental Documents Unit – Coordinator
☐ Roadside Stabilization Unit Erosion Control Designer
Project Coordination Meeting 70 (Clarity Task 5770)
(Conduct during Phase 7, Plan Package Phase)

Attendees:
☐ Environmental Documents Unit Coordinator
☐ Environmental Documents Unit Manager
☐ Environmental Permits Unit Coordinator
☐ Environmental Permits Unit Manager
☐ Environmental Section Manager (Optional)
☐ Roadway Design Engineer Unit Head
☐ Roadway Design Engineer/Designer
☐ Roadway Design Environmental Liaison Engineer
☐ Roadway Design Section Head (Optional)
☐ Roadside Stabilization Unit Erosion Control Designer

Information Provided:
☐ PS&E Plans (OnBase – RD)
☐ Signed NEPA Document (OnBase – EPU)
☐ Green Sheet (OnBase – EDU)

Meeting Agenda:
☐ Review plans to ensure that changes to project due to ROW negotiation and acquisition have been incorporated.
☐ Confirm that restricted areas are denoted on plans before PS&E Turn-in (e.g. detours, ROW, staging areas, access, protected areas, and concrete cleanout)
☐ Verify that Plans, Special Provisions, and NEPA document reflect environmental commitments made in the Green Sheet.
☐ Review Final Scoping Report and confirm the plans reflect final project scope.
☐ Assist Environmental Section in completing “Environmental Certification”
  ☐ Confirm that project beginning and ending and limits of construction are consistent with the NEPA document
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  ☐ Verify Structure numbers match NEPA document
  ☐ Directives for nighttime or daytime construction / lighting, historic properties (if any), tree preservation
  ☐ Easements are shown
  ☐ Confirm threatened and endangered species commitments are in the NEPA document
  ☐ Confirm permits needed and received (404, Stormwater, Floodplain)
  ☐ Confirm that NEPA commitments made it into the Green Sheet
Summary of Commitments:

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Notes:

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Action Items:

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Design Checklist

Note: This is not a complete listing. For further information refer to the DPO, Exhibit H of the DPO, and Chapters Two and Twelve of the Roadway Design Manual.

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<thead>
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<th>Payroll Activity</th>
<th>Comments</th>
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### Miscellaneous

- Read correspondence file
- Begin a list of anticipated special provisions
- Prepare tree count list
- Check grade with bridge division
- Check stopping and passing sight distance
- Cross check construction notes with computations
- Order and review special plans
- Assemble special design, bridge, lighting and traffic plans
- Compaction requirements
- Special surfacing elevations
- Complete special provisions
- Funding split
- Detour location

### Design Details and Construction Notes

- Special plans (flattened slopes for drives and intersections)
- Begin and end project, surfacing and construction
- Surfacing outline
- Grades and surfacing elevations
- Balance points and quantities
- Plot limits of construction for project, intersections, dikes, driveways, channel change, channel cleanouts, waste areas, borrow pits, wetland mitigation, haul roads, spur dikes, culverts and special ditches, etc.
- Typical sections for roadway, channel change, intercepting dikes, county roads, spur, channel under bridge, etc.
- Grades for intersections, frontage roads, detours, etc.
- Contractor will/will not be required to furnish borrow
- Utilities notes - Make sure all underground & above ground utilities are on the plans as reviewed at PIH
- Superelevation notes
- Check, review and verify typical cross-sections
- Horizontal layout of intersections, frontage roads, detours, etc.
- Controlled access breaks
- Bridge construction note
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<td>3 4 5 7 0</td>
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<td>0 0 0 0 0</td>
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- Surcharges
- Show areas where right-of-way limits have been set
- Special placement charts (earthwork)
- Drainage areas, Q values, and headwater
- Special plan (warped slope for guardrail ends)
- Roadway drainage structures
- Roadway drop structures (grading contractor)
- Driveways and driveway culverts
- Do not disturb notes (trees, existing asphalt, wells, etc.)
- Special Ditches
- Dikes (intercepting, ditch, spur)
- Erosion Control
- Backfill note for bridge abutments (if no approach slab) (Group 1 or 6)
- Miscellaneous removal items (houses, septic tanks, pumps and pump islands, cattle gates, sheds, etc.)
- Removing and resetting delineators
- Abandon wells
- Removing asphaltic surface
- Removing brick surface
- Removing gutter
- Removing pavement
- Removing driveway
- Removing walk
- Removing combination curb and gutter
- Removing existing slope curb
- Removing fence
- Removing steps
- Removing retaining walls
- Removing guard posts and guardrail
- Removing discharge structures
- Removing median surfacing
- Removing ditch lining
- Salvage and place topsoil
- Build concrete driveway
- Build island nose
- Build concrete curb (median, barrier, island)
- Build asphalt curb
- Build retaining wall
- Build concrete pavement
- Build median surfacing
- Build steps
- Build sidewalk
- Build curb ramps
- Build gutter
- Build median barrier
- Build crosswalks
- Build delineators
- Adjust delineators to grade
- Pavement patching
- Approach slabs
- Surfaced drives and intersections
### Payroll Activity

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<td>Construction joints</td>
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<td>Impact attenuators</td>
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<td>Guardrail</td>
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<td>Sodding</td>
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<td></td>
<td>Type of contraction joint on 2T sheet</td>
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<td></td>
<td>Pavement Tining</td>
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</tbody>
</table>

*Exhibit B*

July 1, 2012
PUBLIC MEETING CHECKLIST

Instructions

1. The roadway designer shall complete this checklist near the completion of Preliminary Roadway Design (Clarity Task 5350), before the Plan-In-Hand. Review this checklist with your Unit Head in order to determine which, if any, type(s) of advertised public meetings should be held for the project. This is to be reviewed and agreed to by the Assistant Design Engineer and the Roadway Design Engineer.

2. Review this checklist after Roadway Functional Design (Clarity Task 5428), Preliminary ROW Plan Review (Clarity Task 5610), and at all major scope changes to the project.

3. If it has been 12-18 months since your last advertised meeting with the public, the project should be reviewed for an Information Meeting or Information Meeting (Pre-Appraisal).

Meeting Descriptions:

I. Design Public Hearing – An advertised meeting with the general public in the following formats:

   A. Presentational: This provides for a presentational setting with the hearing conducted by the Nebraska Highway Commission. Presentations are made by the Public Involvement Coordinator and the designers of the project. The public is given the opportunity to make recorded comments during the hearing or may submit written comment sheets.

   B. Open House: This format provides for an open house setting consisting of stations within the hearing area where information concerning design, right-of-way, environmental, relocation assistance, etc. is available. This format provides the public the opportunity to have one-on-one conversations with staff and the Highway Commission. The public is given the opportunity to provide recorded comments during the hearing or to submit written comments.

Regardless of the format, a transcript of the hearing proceedings, including the Citizen Comment Sheets, will be produced. This transcript will become part of the project file and subsequent environmental documents.

Factors considered in holding a Design Public Hearing include:

- The project has a Class I or Class III Environmental Classification (See pg. D-2).
- Significant right-of-way acquisition having substantial adverse impact to abutting properties.
- The project includes business or residential relocation.
- There are significant impacts to the community which were not addressed at a previous public meeting.
- A request from the Highway Commissioner, the District Engineer, the Nebraska Department of Transportation administration, or the FHWA.
II. Information Meeting—An advertised meeting held with the public in an informal one-on-one format to answer general questions and to gather information regarding a proposed improvement. An Information Meeting is not usually a recorded meeting but Citizen Comment Sheets are made available to the public.

Factors considered in holding an Information Meeting are similar to the factors listed for a Design Public Hearing. Additional factors for an Information Meeting include the following:

- The elapsed time since a previous advertised public meeting
- A request from the Highway Commissioner, the District Engineer, the Right-of-Way Division, the Nebraska Department of Transportation administration, or the FHWA

An Information Meeting may be held for the following purposes:

- The project has a Class I or Class III Environmental Classification (See below).
- To solicit public input prior to putting proposed design features on a plan. This Information Meeting may be held on the same day as the plan-in-hand.
- To receive public input prior to proceeding with the final design process. This meeting could be held if the public has indicated interest in the project details and may also be used when a public meeting is required to get input and comments associated with the environmental process. Public input is required if the project has adverse effects on a significant historic property and when Section 4 (f) impacts are identified. Public involvement is also required when Section 4(f) impacts are determined to be De Minimis.
- To update the public when there has been a significant change in the scope of the project.
- To meet with adjacent property owners and businesses concerning phasing and access.
- To answer questions regarding the project and the right-of-way acquisition process in a one-on-one informal format, generally referred to as a “Pre-Appraisal Information Meeting”. This meeting is held after the right-of-way appraisal plans are complete and may be attended by representatives of the Right-of-Way Division.

**Environmental Classifications:**

- **Class I Projects** may significantly impact the environment. Class I projects require the preparation of an Environmental Impact Statement.
- **Class II Projects**, based on previous experience, do not have a significant impact on the environment. Class II projects require the completion of a Programmatic Categorical Exclusion, which can be approved by NDOT, or a Categorical Exclusion, which requires FHWA approval.
- **Class III Projects** are projects on which the impact to the environment must be determined. Class III projects require the preparation of an Environmental Assessment.

<table>
<thead>
<tr>
<th>Meeting</th>
<th>Class I Project</th>
<th>Class II Project</th>
<th>Class III Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Meeting</td>
<td>Meeting required</td>
<td>Meeting not required</td>
<td>Meeting may be held if input is needed</td>
</tr>
<tr>
<td>Design Hearing (A signed Draft Environmental Document, and Noise Study (if needed), is required before a Design Hearing can be advertised, if federal funds are involved)</td>
<td>Meeting required; if appropriate, a combined location/design hearing may be held</td>
<td>Meeting may be held if a review of the project (e.g. scope, amount of new right-of-way required, and/or other factors) indicate</td>
<td>Meeting required</td>
</tr>
</tbody>
</table>

**Meetings Required for Environmental Class of Project**
PUBLIC MEETING CHECKLIST
CHECKLIST FOR ROADWAY DESIGN
“ADVERTISED” MEETINGS WITH THE PUBLIC

Project No.: Control No.:  
Project Location:  
Designer: Unit Head:  
Date: Letting Date:  

Administrative Input
Request for an advertised public meeting from a Government Agency. (whom/agency)
Local? State? Federal?  
NDOT (District Engineer, Roadway Design Engineer, etc.)?

Project Impacts

1. Access to property.
   A. Is there a permanent modification of access to a property?  
      Yes ☐ No ☐  
   B. Will the modification of access cause a change in the use of the property?  
      Yes ☐ No ☐  
      Business or Residence and how impacted?

2. Traffic control during construction.
   A. Is there a Detour?  
      Yes ☐ No ☐ Length (miles)  
      Traffic?  ADT (const. yr.)  Location?  
      (Load restrictions?)  
      What is the condition of the alternate routes?
   B. Will there be phasing of the project?  
      Yes ☐ No ☐ Traffic?  ADT (const. yr.)  
      Phasing affects access to business, home, or agriculture?  
      Yes ☐ No ☐  
      What will be the length of time of inconvenience to the public?  
      At what time of the year will the construction be phased?  
      Are there local events which will be impacted by the phasing?
   C. Will the project include a temporary road?  
      How long will the temporary road be needed? (days/months)  
      Is additional R.O.W required for the temporary road?  
      Yes ☐ No ☐  
   D. Does the project affect emergency vehicle access?  
      Yes ☐ No ☐  
      Have you contacted local emergency services?  
      Yes ☐ No ☐  
   E. Does the project affect school crossings/routes?  
      Yes ☐ No ☐  
      Have you contacted school officials?  
      Yes ☐ No ☐
3. **Environmental Issues**

   A. Does the project have a NEPA Environmental Classification?  
      
      Yes □ No □  
      
      (See DR Form 53, “Probable Class of NEPA Action Form” or contact the Environmental Section Manager)  
      
      Class I □ Class II □ or Class III □  
      Class I or III Environmental Classification requires a Design Public Hearing.  

   B. Are wetlands impacted?  
      Yes □ No □  
      Area □ □ acres, Type(s)  
      Channel change?  
      Yes □ No □ Length □ □ feet.  

   C. Is there wetland mitigation on the project?  
      Yes □ No □ How much? □ □ acres.  

   D. Does the project impact burial grounds?  
      Yes □ No □  

   E. Are there noise concerns?  
      Yes □ No □  

   F. Are there contaminated soils?  
      Yes □ No □  

   G. Does the project impact:  
      Parklands □ Historic sites □ Wildlife refuges □  

   H. Are there historical sites on the project?  
      Yes □ No □  
      (If yes, public involvement is required).  

   I. Are there adverse effects on significant historical sites?  
      Yes □ No □  

   J. Does the project impact trees and/or landscaping?  
      Yes □ No □  

**Right-of-Way**

1. **Access Management**

   A. Are you buying Controlled Access?  
      Yes □ No □  
      (If yes, this requires Highway Commission and Governor approval).  

2. **Acquiring Right Of Way** (Yes □ No □)

   If yes – How much? □ □ (acres), □ □ # of tracts impacted?

3. **Items that will require additional R.O.W.**

   A. Are you building additional lanes?  
      Yes □ No □  

   B. Are you building sidewalk or a bike path?  
      Yes □ No □  

   C. Adding traffic signal(s)?  
      Yes □ No □ Where?  

   D. Lighting?  
      Yes □ No □ Intersection? □ Continuous? □  

   E. Does the project include Retaining walls?  
      Yes □ No □  

   F. Does the project include the construction of a drainage system?  
      Yes □ No □  

4. **Bridge overpass or underpass.**

   Vehicular? □ Pedestrian? □ Railroad? □  
   (Review all information from Planning & Project Development)  

5. **Relocations.**

   A. No. of Business □ □ List  
   B. No. of Residences  
   C. Sanitary System?  
      Yes □ No □  

   D. Well?  
      Yes □ No □  

   E. Center pivot/irrigation impacted?  
      Yes □ No □
**Instructions:** Your recommendation for each meeting requires an explanation, even if your answer is no.

The following type(s) of advertised public meetings should be held for this project:

- **Yes □ No □  *Information Meeting***
  Explanation

- **Yes □ No □  *Design Public Hearing* (yes when Environmental Classification I or III)
  Explanation

- **Yes □ No □  **Presentation to the Highway Commission**
  Explanation

- **Yes □ No □  *Information Meeting (Pre-Appraisal)*
  Explanation

- **Yes □ No □  **No Advertised Meeting with the Public**
  Explanation

* Mosaic’s are normally placed on the internet. The timing as to when the information is made available on the internet is determined by the District Engineer and Assistant Design Engineer. Changes to the public involvement decision document shall be approved by Unit Head & Assistant Design Engineer.

Recommended by: _____________________________ / __________________
Unit Head Date

Approved by: _____________________________ / __________________
Rdwy. Design Asst. Design Engineer Date

Approved by: _____________________________ / __________________
P&PD Environmental Manager Date

Approved by: _____________________________ / __________________
Roadway Design Engineer Date

Approved by: _____________________________ / __________________
District Engineer Coordinating w/ Hwy Commissioner Date

cc: State Highway Commissioner
Public Involvement Coordinator
Access Control Determination
Refer to the “Access Control Policy to the State Highway System.”

Necessary documents for Access Control Meetings:

**Preliminary Access Control Determination**
(Is AC needed or not?) Prelim Design, (Clarity Task 5350)
1. Bring As-built plans, 9" by 9" aerial photos,
   a. Note existing access control or not.

**Preliminary Controlled Access Determination** Preliminary Design, (Clarity Task 5350)
1. Bring the Preliminary plans or Engineering Review.
2. Bring current R.O.W. plans, (usually Ownership Plans.)
3. Bring photo plan (this will be used for the actual review).
   a. Note property lines.                     c. Note type of existing access.
   b. Note location of existing access.       d. Note proposed access locations.
4. Prepare and bring Access Summary (See Page E-2).

**Individual Access Determination** Functional Design, (Clarity Task 5428)
3. Bring cross-sections (if applicable).
4. Bring photo plan sheet (this will be used for the actual review).
   a. Note property lines.                     c. Note type of existing access.
   b. Note location of existing access.       d. Note proposed access locations.
5. Prepare and bring Access Summary (See Page E-2).

**Changes or Revisions**
2. Bring photo plan (this will be used for the actual review).
   a. Note property lines.                     c. Note type of existing access.
   b. Note location of existing access.       d. Note proposed access locations.
3. Invite the requester (appraiser/negotiator).
4. Bring cross-sections (if applicable).

*Note: When Access Control is purchased with the project, the Highway Commission and Governor’s approval are required.*

**ROW PERMITS**: shows a list of permits in the area selected
Here’s the program for viewing ROW permits on the Mainframe:
Use CICS1 by entering C1 and your dr#### and password (same as using your time sheet).
   Enter 8 to select Integrated Highway Inventory System.
   Enter 22 to select Use & Occupancy Permits.
   Enter 2 to select Query.
   Enter 3 to select Use & Occupancy Permit by Hwy/County/Type/Status Query.
Enter the highway # and a reference post range – county, type and status may be left blank.

**cc’s ON ACCESS CONTROL LETTERS:**
BRANDIE NEEMANN Planning and Project Development - Division Head
DISTRICT ENGINEER District #
DAN FOREMAN Right of Way Division - R.O.W. Design Engineer
JILL SMITH Right of Way Division - Property Management
DAVE HOLLAND Right of Way Division - Chief Appraiser
JOSEPH WERNING FHWAA
CONSULTANTS (If involved)
## Access Summary

<table>
<thead>
<tr>
<th>(1) Mile</th>
<th>(1) Side</th>
<th>Existing Access Location (Station &amp; Side)</th>
<th>(2) Existing Type of Access (Stage II)</th>
<th>New Access Location (Station &amp; Side)</th>
<th>(3) Type of New Access</th>
<th>(4) Desirable Access Per Mile By Policy</th>
<th>(4) Is Min. Spacing Criteria Met?</th>
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<td>Yes ☑ No ☐</td>
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(1) “Mile” represents the distance from the beginning of the project in whole numbers. “Side” represents the side of the roadway when traveling in the direction of increasing station.

(2) If there is existing access control, use the types shown on R.O.W. ownership plans. If there is no existing access control, this column does not apply.

(3) Use the existing access control type if there is one -- otherwise, leave blank.

(4) See pages 7-8 of the Access Control Policy.
Constructability Issues
(Checklist)

Send invitations with a set of plans if a constructability meeting is held separate from the PIH

**Invite**: Unit Head, District Engineer, District Construction Engineer

**Invite the following as required**: FHWA, Bridge, Assistant Design Engineer, District Maintenance Supervisor, Project Manager, Assistant Construction Engineer (J. Volz), Final Plans Coordinator (F. Brill), Utilities Coordinator, Utility Company Rep, R.O.W., Traffic Engineer, Environmental Section Manager, City/County Rep, AGC, Railroad Liaison, Railroad Company Rep, Lighting, and others as needed.

**Accommodation of traffic**
- Design Speed of Detour
- Intersections
- Location of Obstacle or Hazard
- Shoulder as a Detour (Existing Pavement Conditions)
- Distance between traffic and construction

**Appropriate letting**
- Winter Work
- Availability of Materials
- Time for Construction
- Incentives/ Disincentives/ A + B Bidding
- Begin/ Completion Dates
- Calendar/ Working Days

**Access during Construction**
- Businesses/ Local Traffic
- School Buses
- Emergency Vehicles
- Postal Delivery

**Bridge Design**
- Grades
- Drainage
- Phasing
- Vertical Clearance
- Bridge Width
- MSE Wall Details (height, drainage, etc.)

**Phased earthwork**
- Quantities for each side
- Quantities for each alignment
- Quantities for each phase
- Phased earthwork cross-sections necessary
- Break quantities at county roads

**Airspace Obstructions** – Within four miles of an airport?

**Utility Conflicts** - Early Utility coordination required.

**Right of Way** - Early tracts (as needed)/ Access Easements

**Drainage**
- Phased drainage cross-sections
- Drainage during phased work

**Geotechnical**
- Settlement time
- Unsuitable material
- Available Borrow material

**Environmental**
- 100 year Floodway impact
- Endangered species or plants
- Borrow Pit - exposed ground water
- Hazardous Waste materials

**Special Events** - coordination with the local community as necessary

**Special Provisions**
- Peak Hours
- Lane Closures required
- Complete closures required
- Weekend closures

**Coordination with Others**
- Railroad
- Irrigation Districts
- City/ County/ SID
- Local NRD
- Other Projects
- Bureau of Reclamation
- Nebr. Division of Aeronautics

Items to supply: Plans (1/2 size), Cross-sections (Drainage with phasing shown), Estimate, State & County Map, NDOT “Surface Transportation Program Book”, Schedule of major events – (i.e. Football game schedule), Calendar, and Calculator.

**NOTE**: A letter or e-mail shall be sent to all participants summarizing the meeting conclusions and changes or additional items to review.
Exhibit E
July 1, 2012
# Erosion Control - Plan-In-Hand - Checklist

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is seeding required?</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Is sod required?</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Is silt fence required? (Sand Hills and other sandy areas)</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Is slope protection required? (Sand Hills and other sandy areas)</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Is topsoil to be salvaged?</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Is erosion control netting required? (Sand Hills)</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Is manure available for shoulder stabilization? (Sand Hills only)</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Is the product replacing a waterway? (Contract or ROW item)</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Are there channel changes?</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Is borrow taken from within state right-of-way?</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Are there tree conflicts?</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Are there Federal or Tribal properties?</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Are curbs and flumes required in the rural areas?</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Are there grades between 2.5% and 3.5%?</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Are there grades 3.5% or over?</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Are there slopes steeper than 3:1?</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Are erosion checks required?</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Are intersection dikes required? (Note locations)</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Are wetlands on or encroached upon by the project?</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Are there any environmentally sensitive areas?</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Are there any special seeding requirements? (Ex. Park/Golf Course)</td>
<td>Y</td>
<td>N</td>
</tr>
</tbody>
</table>

**Other Comments:**

- Environmentally Sensitive Areas:

- Soil Type:

- Comments:

---

(1) Highlight on plans and discuss erosion control options with Roadside Stabilization Unit.
(2) Curb and Flumes will be utilized if there are erosion issues.

To be completed on the Plan-In-Hand, in consultation with DE and DCE, then sent to P&P Div., Roadside Development Unit, before preparing the plan-in-hand report.
Covenant and Final; Relinquishment Agreements
Roadway Designers Process

Covenant Relinquishment Agreement: (CRA)
1. Review Planning & Project Development’s (P&PD) CRA(s), if any.
2. Determine if a new or revised CRA is needed.
3. If needed, prepare the following information for the CRA:
   A. Location Map Exhibit (Plan Development Unit). Review with your supervisor.
4. Submit the information to P&PD.
5. Review P&PD’s draft CRA and comment.
6. Receive signed copy before scheduling the dry run of the Public Hearing.

Final Relinquishment Agreement: (FRA)
1. Review Covenant Relinquishment Agreement.
2. Prepare information for FRA.
   A. Modify Location Map Exhibit (Plan Development Unit). Review with your supervisor.
3. Submit the information to P&PD.
4. Review the draft FRA and return it to P&PD.

Routing List for Agreements:
1. Roadway Design - Engineer (Mike Owen)
2. Director’s Office – Deputy Director Engineering (Khalil Jaber)
3. Planning & Project Development - Agreement Services (Jerry Adams)
4. Controller Division Finance Administrator (Marilyn Hayes)
5. Planning & Project Development - Agreement Engineer (Randy ElDorado)
6. Planning & Project Development - Engineer (Brandie Neemann)
7. Return to: Planning & Project Development - Agreement Services (Jerry Adams)
# Cost Estimate Item Checklist

Note: Not a complete listing. For further information see Chapter 12 of the *Roadway Design Manual.*

## Group #1 - Grading

<table>
<thead>
<tr>
<th>Item</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Removing Trees and Stumps</td>
<td>Abandoned Wells</td>
</tr>
<tr>
<td>General Clearing &amp; Grubbing</td>
<td>Building Inertial Barrier Modules</td>
</tr>
<tr>
<td>Covercrop Seeding</td>
<td>Fill Material for Inert. Barrier Modules</td>
</tr>
<tr>
<td><strong>Traffic Control Devices</strong></td>
<td>Retaining Walls</td>
</tr>
<tr>
<td><strong>Field Lab, Type “C”</strong></td>
<td>Chain Link Fence</td>
</tr>
<tr>
<td><strong>Mobilization</strong></td>
<td>Salvaging &amp; Stockpiling Bit. Material</td>
</tr>
<tr>
<td>Excavation</td>
<td>Silt Fence</td>
</tr>
<tr>
<td>Excavation Borrow</td>
<td>Fabric Silt Checks</td>
</tr>
<tr>
<td>Earthwork Measured in Embankment</td>
<td>Wetland Mitigation</td>
</tr>
<tr>
<td>Removal of Unsuitable Material</td>
<td>Wetland Seeding or Salvaging &amp; Stockpiling Hydric Soil</td>
</tr>
<tr>
<td>Excavation (Established Quantity)</td>
<td>MSE Walls - 4 items</td>
</tr>
<tr>
<td>Embankment for surcharge (Established Quantity)</td>
<td>Removals:</td>
</tr>
<tr>
<td>Roadway Grading</td>
<td>- Pavement, Asphalt Surface, Gutter, Driveway, Sidewalk</td>
</tr>
<tr>
<td>Water Applied</td>
<td>- Removing Comb. Curb &amp; Gutter</td>
</tr>
<tr>
<td>ROW Markers</td>
<td>- Removing Curb</td>
</tr>
<tr>
<td>Resetting ROW Markers</td>
<td>- Removing Manholes</td>
</tr>
<tr>
<td>Salvage and Place Topsoil</td>
<td>- Removing Tank</td>
</tr>
<tr>
<td>Salvage and Stockpile Topsoil</td>
<td>- Removing Inlets</td>
</tr>
<tr>
<td>Slope Protection</td>
<td>- Removing Existing Dr. Pipe-Salvage</td>
</tr>
<tr>
<td>Erosion Control</td>
<td>- Removing Existing Guardrail</td>
</tr>
<tr>
<td>Erosion Checks</td>
<td>- Removing Existing Brick Surfacing</td>
</tr>
<tr>
<td>Broken Concrete/Rock Riprap</td>
<td>- Removing Existing Slope Curb</td>
</tr>
<tr>
<td>Driveway Culvert Pipe</td>
<td>- Removing Fence</td>
</tr>
<tr>
<td>Rd. Equiv. Dr. Culvert Pipe</td>
<td>- Removing Steps</td>
</tr>
<tr>
<td>Abandoned Manholes</td>
<td>- Removing Retaining Walls</td>
</tr>
<tr>
<td>Relaying Driveway Culvert Pipe</td>
<td>- Removing Ditch Checks</td>
</tr>
<tr>
<td>Backslope Pipes</td>
<td>- Removing Catch Basins</td>
</tr>
<tr>
<td>Median Pipes</td>
<td>- Removing Junction Boxes</td>
</tr>
<tr>
<td>Temporary Surfacing</td>
<td>- Removing Discharge Structures</td>
</tr>
<tr>
<td>Clear Tract No. *</td>
<td>- Removing Flumes</td>
</tr>
<tr>
<td>Temporary Shoring</td>
<td>- Removing Existing Buildings</td>
</tr>
<tr>
<td>Removing Existing Slab</td>
<td></td>
</tr>
<tr>
<td>Restoration of Borrow Pits</td>
<td></td>
</tr>
<tr>
<td>Gabions, Type *</td>
<td></td>
</tr>
</tbody>
</table>

## Group #2, 2A, or 9A - Detour

<table>
<thead>
<tr>
<th>Item</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Traffic Control Devices</strong></td>
<td>Crushed Rock Surface Course</td>
</tr>
<tr>
<td><strong>Gravel Surface Course</strong></td>
<td>Calcium Chloride, Applied</td>
</tr>
<tr>
<td>Shoofly Surfacing</td>
<td>Gravel Embedment</td>
</tr>
<tr>
<td>Temporary Signals</td>
<td>Winter Gravel</td>
</tr>
<tr>
<td>Temporary Bridge</td>
<td>Crossovers</td>
</tr>
<tr>
<td>Temporary Lighting</td>
<td>Temporary Gravel</td>
</tr>
<tr>
<td>Temporary Railroad Crossing/Signals</td>
<td></td>
</tr>
</tbody>
</table>
Groups #3 and #9 - Surfacing

Traffic Control Devices
Field Laboratory, Type “B”
Mobilization
Surfacing Under Guardrail
Delineators, Type *
Gravel or Crushed Rock Surface Course (for Intersections & Drives)
Gravel Surface Course
Gravel Embedment
Special Surface Course for Mailbox Turnouts
Mailbox Posts
Sodding
Placing Topsoil
Breaking Pavement Concrete Curb
Concrete Island Curb
Concrete Median Curb
Concrete Barrier Curb
Concrete Combination Curb & Gutter
Concrete Sidewalk
Concrete Median Surfacing
Concrete for Island Noise
Concrete Median Barrier
Concrete Driveways
Foundation Course (Bituminous)
Foundation Course (Regular)
Foundation Course (Crushed Concrete)
Adjust _______ Box to Grade (Curb Stop, Valve, Roadway, etc.)
Reconstruct Manhole to Grade
Adjust Manhole to Grade
Soil Aggregate Base Course
Slope Drains
Flumes, Type *
15” Corrugated Culvert (for flumes)
Soil Aggregate Base Course
Milling, Class *
Concrete Base Course Widening

Concrete Pavement, Type *
(Patching Concrete with Concrete)
Pavement Patching, Type *
(Patching Concrete with Asphalt)
Pipe Underdrains
Granular Subdrains
*Concrete Pavement
*Reinforced Concrete Pavement
Asphalt Concrete Type *
Asphalt Concrete for Patching
(include with roadway asphalt)
Asphalt Concrete for Intersections and Drives
Asphalt Concrete for Median Surfacing
Asphalt Oil for Prime Coat
Emulsified Asphalt for Tack Coat
Asphalt Cement for Asphalt Concrete
Constructing Asphalt Concrete Curb
Constructing Asphalt Concrete Flumes
Constructing Asphalt Concrete Island Nose
Preparation for Expansion Joints
Preparation of Intersections & Drives,
Type “A, B & C”
Rental of Loader, Motorgrader, and/or Dump Truck
Water Applied (*1M. gal/sta) (**0.5 gal/sta)
Shoulder Construction
Shoulder Subgrade Preparation
Subgrade Reconstruction
Median Construction
Subgrade Preparation
Subgrade Stabilization
Soil Binder for Subgrade Stabilization
(see computation form)
Armor Coat
Bituminous Sand
 Crushed Rock Surface Course
### Group #4 - Culverts

<table>
<thead>
<tr>
<th>Traffic Control Devices</th>
<th>Mobilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>CI Covers, Frames, Grate Rings, Flanges</td>
<td>Reinforced Steel for Box culverts</td>
</tr>
<tr>
<td>Removing Existing FES</td>
<td>Reinforced Steel for Steps, Catch Basins, Collars and Retaining Walls</td>
</tr>
<tr>
<td>Removing Existing Headwalls</td>
<td>Dampproofing</td>
</tr>
<tr>
<td>Preparation of Existing Structure</td>
<td>Jacking Steel Casing</td>
</tr>
<tr>
<td>Remove Existing Structure</td>
<td>Slope Drains</td>
</tr>
<tr>
<td>Excavation for Box Culverts</td>
<td>Flumes, Type *</td>
</tr>
<tr>
<td>Excavation for Culvert Pipes &amp; Headwalls</td>
<td>Flume Spillway</td>
</tr>
<tr>
<td>Culvert Pipe</td>
<td>Cast Iron Covers, Frames, Grates, Rings, Flanges</td>
</tr>
<tr>
<td>Corrugated Metal Pipe</td>
<td>Area Inlets</td>
</tr>
<tr>
<td>Jacking Reinforced Concrete Sewer Pipe</td>
<td>Junction Box</td>
</tr>
<tr>
<td>Jacking Reinforced Concrete Pipe, Class *</td>
<td>Build Manholes</td>
</tr>
<tr>
<td>Reinforced Concrete Pipe, Class IV</td>
<td>Irrigation Structures</td>
</tr>
<tr>
<td>Reinforced Concrete Pipe, Class V</td>
<td>Remove Sewer Pipe</td>
</tr>
<tr>
<td>Reinforced Concrete Pipe</td>
<td>Tapping Existing Manhole</td>
</tr>
<tr>
<td>Reinforced Concrete Sewer Pipe</td>
<td>Tapping Existing Structure</td>
</tr>
<tr>
<td>Clay Sewer Pipe</td>
<td>Tapping Existing Culvert</td>
</tr>
<tr>
<td>Culvert Sand-fill</td>
<td>Inlet Riser</td>
</tr>
<tr>
<td>Flared End Sections</td>
<td>Relocating CMP, RCP</td>
</tr>
<tr>
<td>Metal FES</td>
<td>Rock Riprap &amp; Filter Fabric</td>
</tr>
<tr>
<td>Concrete FES</td>
<td>Concrete for Inlets &amp; Junction Boxes</td>
</tr>
<tr>
<td>Bar Grates for FES</td>
<td>(5.0 cu yd each)</td>
</tr>
<tr>
<td>Concrete for Box Culverts</td>
<td>Steel for Inlets &amp; Junction Boxes</td>
</tr>
<tr>
<td>Concrete for Headwalls, Steps, Catch Basins, Collars, Retaining Walls and Plugs</td>
<td>(250 lbs each)</td>
</tr>
<tr>
<td></td>
<td>Temporary Shoring</td>
</tr>
</tbody>
</table>

### Group #5 - Landscaping

<table>
<thead>
<tr>
<th>Traffic Control Devices</th>
<th>Seeding, Type *</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fabric Silt Checks</td>
</tr>
<tr>
<td></td>
<td>Landscaping</td>
</tr>
</tbody>
</table>

### Group #6 - Bridge

<table>
<thead>
<tr>
<th>Traffic Control Devices</th>
<th>Mobilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSE Walls - add 4 items</td>
<td>Reinforced Steel for Pavement Approach Slabs</td>
</tr>
<tr>
<td>Major Riprap Channel Lining</td>
<td>Bridges (sq ft)</td>
</tr>
<tr>
<td>Concrete for Pavement Approach Slabs</td>
<td>Bridge Removal</td>
</tr>
<tr>
<td></td>
<td>Channel Change</td>
</tr>
</tbody>
</table>
### Group #7

<table>
<thead>
<tr>
<th>Traffic Control Devices</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>W or Thrie-beam Guardrail</td>
<td></td>
</tr>
<tr>
<td>End Treatment type * (I or II)</td>
<td></td>
</tr>
<tr>
<td>Bullnose 12.5'</td>
<td></td>
</tr>
<tr>
<td>Special Guardrail Posts, Type *</td>
<td></td>
</tr>
<tr>
<td>Guardrail &amp; Accessories</td>
<td></td>
</tr>
<tr>
<td>(BAS, End shoe etc.)</td>
<td></td>
</tr>
<tr>
<td>Removing &amp; Resetting Safety Beam GR</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Traffic Control Devices</td>
<td></td>
</tr>
<tr>
<td>Cable Guardrail / anchorage assembly</td>
<td></td>
</tr>
<tr>
<td>Remove &amp; Reset ROW Fence</td>
<td></td>
</tr>
<tr>
<td>Terminal Anchorage Section</td>
<td></td>
</tr>
<tr>
<td>Guard Posts</td>
<td></td>
</tr>
<tr>
<td>ROW Fence &amp; Accessories</td>
<td></td>
</tr>
<tr>
<td>(PET, C.C., Type I, EP, PP)</td>
<td></td>
</tr>
<tr>
<td>Chain Link Fence &amp; Accessories</td>
<td></td>
</tr>
<tr>
<td>Gates</td>
<td></td>
</tr>
</tbody>
</table>

### Group #8

<table>
<thead>
<tr>
<th>Traffic Control Devices</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lighting</td>
<td></td>
</tr>
<tr>
<td>Signalization</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Traffic Control Devices</td>
<td></td>
</tr>
<tr>
<td>Sign Supports</td>
<td></td>
</tr>
<tr>
<td>Permanent Signing</td>
<td></td>
</tr>
</tbody>
</table>

### Miscellaneous Group

| Noise Walls                     |   |
|                                 |   |
| Railroad Crossings/Signals/Communication Lines |   |
|                                 |   |
| Irrigation Structures           |   |
|                                 |   |
| Non-Betterment City Utilities Relocation |   |
| Water Retention Structures      |   |
| Any Engineering or Construction Accomplished by Others |   |

### Other Project Costs (for information only, calculated by others)

- Construction Engineering 7% of base engr. costs.
- Contingencies 3% of base engineering costs
- P.E. 4.4% for New Construction
- P.E. 0.5% for Resurfacing
- P.E. 8% for New Construction (Consultant Design)
- Utilities 2.9%
- ROW Acres x Unit Price/Acre (See Chapter 12 of the Roadway Design Manual)
- ROW Items (Relocation, Center Pivots, etc.)
- Special Utility Items (Pipelines, Substation, large overhead power, fiber optics, etc.)

* Stands for type to be determined.

Estimator will add items in blocks.
Distribution of Plans

Please note substantial changes from the Engineering Review on the plans transmittal letter.

**Clarity Task 5380: Preliminary Plans** for Plan-In-Hand (PIH). Include location map & typical section

**# Of Sets** Half size plans (use cell “Preliminary Plans”) distribute 2 weeks prior to PIH

**4 -** For our use on the Plan-In-Hand field inspection

**1 -** Bridge [M. Traynowicz] (if applicable)

**1 -** Traffic Engineering [D. Waddle] (send “Constructability Issues” Checklist, Exhibit E)

**1 -** R.O.W. - invite designer on PIH [cc D. Foreman & ROW Project Manager] (if buying ROW)

**2 -** Materials & Research [M. Lindemann, & B. Varilek; thru M. Syslo]

**3 -** District Construction Office (DCE/Office, PM, & Main. Super. Send “Constructability Issues” Checklist, Ex. E)

**1 -** Railroad Liaison [T. Palmer] (incl: X-sect, show exist. RR ROW & location of rails)

**4 -** Planning & Project Development (P&PD) [2 for J. Jurgens, & 2 for *(Scoping & Utilities Engr.) ____________] (invite to PIH if applicable, See Exhibit J, pg. 5)

**2 -** FHWA (when federal oversight) [Joseph Werning] (only Interstate New and Reconstruction or POD/IPOCI projects)

**1 -** Plans Manager [P. Brunken]

**1 -** City or County (if impacted)

**1 -** Airport Authority (if airport near project)

**2 -** Construction Div. [J. Knott, F. Brill – “Constructability Issues” Checklist, Exhibit E. ask for Working days/ Letting]

Notify that the Roadway Design PIH Plan set is available on OnBase – DCE, Lighting Engineer [C. Humphrey], P&PD Scoping & Utilities Engr. [___________], P&PD Environmental Permits Unit Manager [T. Ringenberg], P&PD Roadside Stabilization Supervision [R. Poe], P&PD Technical Documents Supervisor [D. Dittmer], P&PD Environ Documents Supervisor [J. Barber], P&PD Traffic Counter Shop [S. Stroud PSS], Project Manager [See Sheet I-2]

* - Invite to PIH with District Construction Engr., Maint. Supervisor, & PM – (also on Exhibit J, pg. 5)

**Note:** Railroad personnel need 5 weeks notice to attend PIH

**Clarity Task 5434: Functional Plans** (Hearing Plans) (use cell “Preliminary Plans”)

**#2 sets** (1/2) - District Construction Office (DCE/Office & PM)

**1 set** (1/2) - Affected Divisions and FHWA, if major change was made to the PIH plans (Ex. Major change in the grade line - 1 (1/2 size) set to M. Lindemann, M&R)

**1 set** (1/2) - City and/or County (if impacted)

**4 sets** 2(full) & 2(1/2) - Public Hearing Plans - take along to Public Hearing

**#1 set** (1/2) - Planning & Project Development [Scoping & Utilities Engr. ____________]

**1 set** (1/2) - Plans Manager [P. Brunken]

**1 set** (1/2) - Railroad Liaison [T. Palmer] (Incl. X-sec. showing exist. RR ROW & location of the rails)

Notify that the Roadway Design Functional Plan set is available In OnBase: DCE, Traffic Engineering [D. Waddle], P&PD Environmental Section Mgr. [J. Jurgens], P&PD Scoping & Utilities Engr. ____________, PSS Project Manager [See Sheet I-2]

# - Distribute 5 weeks prior to Public Hearing if applicable
Exhibit I
April 7, 2016

Clarity Task 5576: Final Design Plans - Include Location map & typical section

# Of Sets (half size plans) (use cell “Preliminary Plans”)
1 - Construction Div. [F. Brill - Send “Constructability Issues” Checklist, Exhibit E]
1 - Plans Manager [P. Brunken]
2 - Planning & Project Development [J. Barber, & R. Poe]
2 - Materials & Research [M. Lindemann, & B. Varilek; thru M. Syslo] (3 sets if Asphalt Surfacing)
1 - R.O.W. Design Engineer [D. Foreman] (include cross sections)
2 - District Construction Office (DCE/Office & PM)
1 - FHWA [Joseph Werning] (If federal overview is required for project)
1 - Bridge [M. Traynowicz] (plan and profile sheets of bridge areas only)
1 - City and/or County (if impacted)
2 - Highway Archaeologist [K. Paitz]
1 - Keep available in Roadway Design (stamp Final Design Plans)
1 - Airport Authority (if near airport, See Exhibit R)
1 - Railroad Liaison [T. Palmer] (include culvert X-sec. & X-sec. w/ RR ROW and location of rails shown)
Notify that the Roadway Design Final Design Plan set is available on OnBase – DCE, Traffic Engr. & Asst. Traffic Engr. [D. Waddle & A. Swanson], P&PD Environmental Section Manager [J. Jurgens], Lighting Engineer [C. Humphrey], P&PD Scoping & Utilities Engr. [ ____________ ], PSS Project Manager [See Below]

Clarity Task 5614: Design Plans to Utility Section

1 - P&PD [Scoping & Utilities Engr ____________ ] send after ROW negotiations. (Exhibit Q)
Notify that the Roadway Design Final Design Plan set is available on OnBase - P&PD Scoping & Utilities Engr. [ ____________ ], PSS Project Manager [See Below]

NOTE: Changes to the design after Final Design plans are sent out: A Notification of change should be given to the affected Divisions (ex: ROW, Wetlands/ Environmental Section, Utilities, District - DCE & PM). This note or E-mail should include: Project Name & Control Number, a brief description of the change, location, effect on the project, and the anticipated time updated plans will be available.

PSS Project Manager Assignments
ITS, Safety & Interstate Projects: Lloyd Peterson
Districts 1 & 6: Cindy Hosler
District 2: Mark Fischer
Districts 3 & 7: Paul Fintel
Districts 4 & 8: Nick Burnham
District 5: Jaime Kamarad
## PLAN-IN-HAND CHECKLIST

Date of Inspection: _____/_____/_____

<table>
<thead>
<tr>
<th>Project No:</th>
<th>Project Name:</th>
<th>C.N.</th>
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<table>
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<th>Project Location:</th>
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<tr>
<th>Designer:</th>
<th>Unit Head:</th>
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**Project Type:**
- New Construction [ ]
- Reconstruction [ ]
- 3R [ ]

**Design Standard:**

**Design Speed:** _____ mph

**Terrain:**
- Level [ ]
- Rolling [ ]

**National Functional Classification:**

**State Functional Classification:**

**On NHS?**
- Yes [ ]
- No [ ]

**On Priority Commercial System?**
- Yes [ ]
- No [ ]

**Letting Date:**

**Working Days:**

**Existing Roadway:**
- Width _____
- Depth _____
- Type _____
- Earth Shoulder Width: _____

**Existing Shoulder:**
- Width _____
- Depth _____
- Type _____

**Design Roadway:**
- Width _____
- Depth _____
- Type _____
- Mill: Class/Depth _____/_____

**Design Shoulder:**
- Width _____
- Depth _____
- Type _____
- Earth Shoulder Width: _____

**Existing Clear Zone/Lateral Obstacle Clearance:**

**Existing 1:6 Side Slopes?**

<table>
<thead>
<tr>
<th>TRAFFIC COUNT</th>
<th>20</th>
<th>20</th>
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<tbody>
<tr>
<td>ADT</td>
<td></td>
<td></td>
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<tr>
<td>DHV</td>
<td></td>
<td></td>
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<tr>
<td>% Heavy Trucks</td>
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<tr>
<td>Twenty-Year Forecast Map:</td>
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</table>

**Attendance:**

________________________________________

________________________________________

________________________________________

________________________________________

________________________________________
List of specific design questions:

Lighting recommendations:

Utility conflicts or utilities not show on plans:

Stream Gauge installations:

Substation locations:

Railroad involvement (measure distance to signals and length of crossing):

Safety Hazards within 1000 ft. of the project:

Airports within four miles of the project (see Exhibit R):

Bridge recommendations:

Bridge structures less than 20 ft. in length (notify Bridge Division for inspection):

Guardrail to remain in place; do end treatments meet NCHPR 350 or MASH?

Guardrail to remain in place; height at completion of project (28 in. min.):
Guardrail connections to a bridge; do they meet current standards? (request determination from Bridge):

Surfacing or removal recommendation for raised medians (request from Traffic):

Widening recommendations for horizontal curves:

Within corporate limits of:

Hazardous waste/underground storage tank sites:

Wetland/floodplain considerations:

4-F/6-F lands impacted:

Tree/stump count (trees/stumps larger than 80 in. circumference at 40 in. height):

Clearing & grubbing:

Relinquishments:

Additional survey:

FHWA Design Exceptions/Relaxations of the MDS:
DISTRICT RECOMMENDATIONS:

Public Meeting (Exhibit C):

Balance factor and material availability:

Accommodation of Traffic:

Detour (include Hwy #s and Ref. Posts):

Phasing/Constructability Issues (Exhibit E):

Temporary road location and design:

Traffic affected adversely enough to be a “Significant Project”? Yes ☐ No ☐
(If Yes, a Traffic Management Plan is required, see Exhibit K, pg. K-5).

Guardrail removal:

Salvage items: (e.g. guardrail, delineators)

Surfacing comments:

Other road templates:

Snow control:

Erosion Control considerations (Exhibit F):

Preferred Concrete Flume Type:

Special accessibility needs during construction (ADA):

Sidewalks/Bicycle Paths:

Items to be accomplished by State Forces:

Re-establish Lot Corners (corridor protection, etc.)? Yes ☐ No ☐

Are logo signs to be removed? Yes ☐ No ☐

Miscellaneous:
INVITE TO THE PLAN-IN-HAND
(See Exhibit I for distribution of plans)

1. Bridge Personnel *(if bridges on project)*
2. R.O.W. Designer [cc D. Foreman & ROW Project Manager] *(if buying ROW)*
3. Materials & Research – Geotechnical Engineer [M. Lindemann]
4. District – Engineer, Construction Engineer, Maintenance Supervisor, Project Manager
5. Railroad Liaison [T. Palmer] (RR personnel need 5 weeks advance notice to attend PIH)
6. Planning & Project Development - Environmental [T. Ringenberg, R. Poe, D. Dittmer, J. Barber, and J. Jurgens] *(if applicable. Invite J. Jurgens to New or Reconstructed projects only)*
7. Planning & Project Development – Assigned Environmental Permits Unit Coordinator [M Schroer, R. Yerdon, J. Williams, K. Baker, P. Sward, or S. Sisel] *(if applicable)* Please verify your project coordinator in Clarity before sending invitations.
8. T&E Biologist [M. Marinovich] *(if applicable)*
9. Planning & Project Development - Scoping & Utilities Engineer [___________ ]
10. Planning & Project Development - Utilities Coordinator [through Scoping & Utilities Engineer ___________] 
11. FHWA (when oversight) [Joseph Werning] *(only Interstate New and Reconstruction or PODI/POCI projects)*
12. City and/or County Personnel *(if impacted)*

ITEMS TO TAKE ON PIH:

- Camera, This checklist or a customized list
- 100 ft. tape or equivalent Correspondence file(s)
- Digital hand level Four sets of half-size plans
- Safety vest, cap/hard hat One set of half-size cross sections
- Strobe light One set of ROW ownership plans

**NOTE:** Be aware of your surroundings, traffic may not slow down for you and rattlesnakes enjoy to warmth of the culverts that you are inspecting.
PRE & POST PLAN-IN-HAND NOTES

Wetlands/ Environmental Issues: Following the plan in hand inspection, if there are changes to the project the designer will meet with the Environmental Program Manager or his representative to review the changes and determine if changes to the pre-permit application consultation process will be necessary.

3R Projects: The need for a plan-in-hand will be determined on a project-by-project basis. A plan-in-hand is required if the project is on the NHS. A plan-in-hand is not required if a project has existing 1:6 foreslopes, but may be held if it would be beneficial.

Raised median: Raised medians on high speed roadways will be usually be removed with the project and replaced with a painted median. For existing raised medians on the mainline roadway: check with the Traffic Division before the plan-in-hand and with the District at the plan-in-hand to find out if they have a very good reason why the raised median should remain.

Airplane: If taking an aircraft and extra seats are available coordinate with the Bridge Division in case they need to inspect a nearby bridge.

Municipalities: If a project is located within the corporate limits and we anticipate the municipality will need to share in the project’s cost we need to invite representatives of the municipality to attend the plan-in-hand.

Lighting: (Determined by the Lighting Engineer) If lighting is needed tell the municipality at the plan-in-hand what their share of the estimated costs will be for the installation of the lights and that the energy and maintenance costs will be 100% the municipality’s cost. This also needs to be in the city agreement (the energy costs will not be in the city agreement but should be known in case the municipality asks). Thus, well in advance of the plan-in-hand, we need to get a recommendation from the Lighting Engineer if lighting will or will not be a part of the project and what its estimated construction costs will be as well as what the anticipated energy costs will be.

Utilities: Review project with Utility Coordinator before the plan-in-hand. Invite them to the plan-in-hand. After the plan-in-hand meet with the Utility Coordinator to review utilities that will need to be surveyed.

Miscellaneous: If the project is likely to have questions from the public, generally an urban project or one with major new alignment, a meeting may be scheduled shortly after the plan-in-hand with the Director and Deputy Director-Engineering to inform them about the project.
Plan-In-Hand Report Outline

Date: Date of Report (Note: After the PIH Report has been routed, change this to the date of the approved report)
From: Designer ______________________________
To: Project File
Thru: Unit Head or Assistant Design Engineer____________________________
Subject: Plan-In-Hand Report/Scoping Document

Project number, name of project, and control number

★ Clarity Schedule:
The Clarity "Plan-In-Hand" late date is __/__/__.
The Clarity letting date is __/__/__.

★ Location (CE): Give a brief description of location, including city, county, highway/roadway name, highway number, beginning and ending mileposts*, and, if necessary, give the distance to nearest landmark (e.g. 15 miles north of local airport).

★ Scope of Work: General statement of work involved [Grading, structures, surfacing type/depth (Lane and Shoulder), etc.]

★ Traffic Count (13.1): Tabular form (New & Recon. = Initial year of construction and 20 years in the future) (3R = Initial year of construction and 20 years in the future for concrete surfacing and full depth asphalt surfacing or initial year of construction and 10 years in the future for Asphalt overlay).

★ Design Standard (14.1):
1. New and Reconstructed - DR number, class, and terrain
2. (3R) - design year traffic (Initial year of construction plus 20 years for Concrete surfacing and full depth Asphalt surfacing or 10 years for Asphalt overlay).
3. On Priority Commercial System?
4. On National Highway System?
(14.1) Note if the project will/will not include the addition of through lane capacity. (An increase to through lane capacity can be described as: physically adding through traffic lanes, grade separation for either roads or railroads, or adding auxiliary lanes that are at least 1 mile long or are made continuous through a series of successive interchanges.)

★ Crash History Analysis: Include a statement such as
“Traffic Engineering has performed a review and analysis of the crashes on this segment of roadway and as a result of this study have determined that (1) no additional crash mitigation measures are necessary, or (2) the following mitigation measures will be incorporated in the project, or (3) additional study is necessary at the following locations to determine the appropriate measures (list locations). The full details of the Traffic Engineering report are in the project file.”

★ General: Date of the plan-in-hand and persons present

★ Bridges: Proposed work if applicable, include the following statement for each structure: “The bridge scope of work meets the requirements of the Nebraska Minimum Design Standards for new bridges, reconstructed bridges, or bridges to remain in place.”

★ Agreements: List agreements required and city participation if required

★ Balance Factor: Balance factor recommended by the District

★ Material Needed: Note “Project is balanced” or where borrow may be available

★ Accommodation of Traffic (15.1 - 15.2, 15.4 - 15.9, 16.2 - 16.6): (Exhibit E)
Detour used – use highway #’s and reference posts (If no detour, state “No detour is anticipated for construction activities on this project.”)
Phasing
Temporary Road location and design
Traffic affected adversely enough to be classified a “Significant Project” (See Page K-7)
Answer the following questions:
• (15.1 - 15.2) How many working days will the detour, temporary road, or ramp closure be in effect?
• (15.4, 15.8) Is the adverse (out-of-direction) travel related to the detour, temporary road, or ramp closure greater than 5 miles (in an urban area, defined as population of 5,000 or greater within corporate limits) or 25 miles (in a rural area)? Describe the detour route and expected duration. Note if any improvements will be necessary on the detour route.
• (15.5) Will the project result in a temporary or permanent interference with local special events or festivities? (Interference would include any construction activities occurring on the same segment of street utilized for the festivities, closure of a road used for festivities, closure of access for any duration to an adjacent property used for the festivities during event, or complete closure of a main route to the town during the festivities.)
• (15.6) Will the project result in temporary or permanent adverse effects to through-traffic dependent businesses?
• (15.7) Will the project result in substantial permanent traffic pattern changes or disruptions, such as permanently close a roadway or roadway intersection, increase through lane capacity, create new intersections, or convert the roadway into a higher classification roadway?
• (15.9) Note mitigation measures or commitments intended to avoid, minimize or offset detours or other traffic impacts.
• (16.2 - 16.3) Is access to a residential property anticipated to be temporarily closed during construction?
  - No
  - Yes, for greater than 5 working (business) days
  - Yes, for greater than 10 working (business) days
• (16.4) Will access to a business be closed during operational hours?
• (16.5) Will there be restricted access emergency service facilities or providers during construction?
• (16.6) Will the project potentially permanently change the functional utility of a property? (Example: If the adjacent property requires heavy truck access and the access change is such that heavy trucks could no longer make the revised turn radii into the property, this would change the functionality of the adjacent property.)

★ **Constructability Issues:** If any (Exhibit E)
★ **Changes:** Major changes to the Planning Document and any changes to the plan-in-hand plans [Incl. est. cost of changes (Line shifts etc)]
★ **Right-of-Way (1.1 - 1.5, 16.1):**
  (1.1) ROW (including temporary or permanent easements) will/will not be acquired on this project.
  (1.2) *(If ROW will be required:)* The estimated amount of ROW acquired will/will not be greater than two AC/mile. *(To determine average acres per mile, include the total estimated acreage for all ROW required for construction (including temporary and permanent easements). For projects under one mile in length, the estimated total acreage of easements/ROW must be less than two acres.)*
  Major property improvements are/are not proposed to be removed as a part of this project. The improvements to be removed are *(Provide description. Examples of major property improvements include residential and business structures, functional garages or outbuildings, or other features which would change the functional utility of the property. Examples of minor improvements include fencing, landscaping, sprinkler systems, and mailboxes.)*
  (1.3) The type of property proposed to be acquired is *(provide description, i.e. farmland, pasture, business, home, apartment/rental, occupied/vacant, functional/dilapidated).*
  (1.4-1.5) The preliminary estimate of ROW acquisition is: ____ acres of permanent ROW/Easements, and ____ acres of temporary ROW/Easements.
  (16.1) Note if any access to businesses or residences will be permanently closed.
  Lot corner establishment: contract item? Access Control Committee recommendation
★ **Relocation Assistance (1.6 - 1.7):** Note if relocation assistance or building removal will be required
  (1.6) There are up to # relocations anticipated; up to # residential, and up to # non-residential.
  (1.7) *(Describe the type of non-residential relocation; i.e., type of activity conducted by the business or farm)*
**Miscellaneous (12.1, 20.1):** Shelterbelt or irrigation well removals, pivot interference, special access consideration, drainage, channel changes, median surfacing, etc.

(12.1) Note if a need for noise mitigation measures has been established.
(20.1) Note if a Wellhead Protection Area occurs within the project study area. *(Refer to IER)*

**Snow Control:** Note if any snow control measures are proposed (4:1 backslope, living snow fence, wider ditch, etc.).

**Relinquishments:** Potential highway relinquishments to county or city

**Roadside Development:** Type of seeding, erosion control and present or future landscaping plan

**MS4 (8.2 - 8.3):**

(8.2) Project located in an MS4 Community? Stormwater Treatment assessment required? Specify if Treatment STFs will be included in the project.
(8.3) Is there more than one acre of ground disturbance?

**Public Meetings (18.1):** Anticipated public involvement or public involvement activities that have already been conducted. Note any unresolved controversy.

**4F-6F Lands (2.1, 3.1):**

Note if there are any 4F or 6F lands within the project limits and if they are impacted by the project.
(2.1) *Section 4(f) properties are planned or existing publicly owned parks, recreation areas, or wildlife and waterfowl refuges, or any significant historic sites (including historic bridges eligible for National Register of Historic Places listing) officially designated as such by a Federal, State, or local agency.*
(3.1) *Section 6(f) lands are those where Land and Water Conservation Fund Act (L&WCF) funds were used to acquire property or to improve property. Coordinate with P&P to determine if there are 6(f) properties within the project limits.*

**Historic Properties (10.1):** Note if there are any properties listed or eligible for the National Register of Historic Properties in the study area and potential impacts.

**Signals:** Anticipated traffic signals.

**Lighting:** Anticipated lighting; intersection or continuous.

**Utilities (4.2):** Any unusual utility conflicts. Are stream gauge installations present? *(Update utilities shown on plans.)*

(4.2) Note if federal funds will be used to relocate utilities or if the project contractor will be responsible for utility relocations. *(Discuss with Utility Coordinator)*

**Railroad:** Any railroad involvement on project or detour.

**Removals:** Note if Maintenance will remove guardrail or delineators as recommended by the District.

**3R Project Guardrail:** Maintain, replace, or remove? (3R guardrail will be maintained or replaced unless we are grading a safety section, i.e. 1:6 grading to the Horizontal Clear Zone for a New or Reconstructed project)

**Wetlands/Waters of the U.S. (7.1, 7.3 – 7.4):**

(7.1) Note if there are wetlands, stream channels, or other waters within the project study area.
(7.3 – 7.4) Note the estimated amount of wetland impacts in acres. *(Record the amount under 0.5 ac and then in 0.5 acre increments above 0.5 acres.)*

Note if on-site mitigation is proposed.

**Floodplain/Floodway (6.1 – 6.2):**

(6.1) Encroachment on FEMA flood plain (See Exhibit S for wording).
(6.2) Will the project action cause a greater than one foot rise in the Base Flood Elevation (BFE), any rise in a floodplain that potentially impacts an adjacent structure, or any rise in a floodway? Yes    No    N/A

**Special Investigation:** Any areas requiring special investigation from other Divisions.

**Construction Schedule:** Working days/ construction seasons. Request from the Final Plans Coordinator: Construction Division.

**Templates:** Connecting highway or street typical section.

**Exceptions/ Relaxation of Standards:** Note requests for exceptions or relaxation of standards, Incl. supporting data. *(Note if “No exceptions are required”)*.
**Hazardous Waste (11.4):** Note previous or existing gas stations, fuel storage sites, factories, landfills, substations, etc. - permit requirements?

(11.4) Note if any soil disturbance will occur below or beyond the pre-existing ground prior to the original roadway construction within an active Superfund site. *(Refer to IER for determination of Superfund site within the project study area.)*

**Safety Enhancements:** List safety enhancements *(Page K-6).*

**Accommodation of Bicycles and Pedestrians (4.3):** If shared-use paths will be included on this project, briefly note where: shared-use path… station to station on the south side. If shared-use paths will not be included, briefly mention items that will improve shared-use travel such as new surfacing, surfaced or widened shoulders.

**Curb Ramps & Sidewalks:** Note whether curb ramp and sidewalk construction will be included on the project. For example: “Curb ramps and sidewalks are in place and will not be included with this project” or “Curb ramps will be included and blended to the sidewalks where required within the project limits.”

**ADA Access During Construction:** See Chapter Sixteen of the RDM, Section 11.

**Retaining Walls:** Height, Length, and location, or “None anticipated.”

**Airport (20.3):** List airports within four miles of the project and any coordination that has occurred with the Division of Aeronautics.

Refer to the “Instructions and Guidance for Completing the Nebraska Categorical Exclusion Determination Form for Federal-Aid Projects” as guidance for the items in parenthesis (e.g. **Traffic Count (13.1)**).

**Attachments:**
1. Location Map
2. Detour Map, if applicable
3. Planning Document (for approval routing only, without the Accidents)
4. Purpose and Need Statement (for approval routing only)
5. Project Description (for approval routing only)
6. Pavement Determination (for approval routing only)
7. Form DR-76, “Principal Controlling Design Criteria” (for approval routing only)
8. Miscellaneous
9. T&E Checklist (for approval routing only)

**Note:** DO NOT INCLUDE the Accident Report (NOT EVEN for approval routing)

**Verify that the following documents are current and filed in OnBase:**
1. Purpose and Need Statement
2. Project Description
3. T&E Checklist

Refer to the "Instructions and Guidance for Completing the Nebraska Categorical Exclusion Determination Form for Federal-Aid Projects" as guidance for the items in parenthesis (e.g. Traffic Count (13.1)).
Plan-In-Hand Report Transmittal

Approval Routing:
1. Roadway Design Assistant Design Engineer #1
2. Roadway Design Assistant Design Engineer #2
3. Roadway Design Assistant Design Engineer #3
4. Roadway Design Assistant Design Engineer #4
5. Roadway Design Assistant Design Engineer #5 (in charge of project)
6. Roadway Design Assistant Design Engineer #6 [N. Sorben]
7. Roadway Design Engineer [M. Owen]
8. Traffic Engineer [D. Waddle]
9. Bridge Engineer [M. Traynowicz]
10. District - District Engineer
11. Roadway Designer Engineer [M. Owen]
12. Roadway Design Asst Design Engr. #5 (in charge of project)
13. Roadway Design Administrative Assistant [L. Piening]

Send Approved Copies To:
- Bridge Engineer [M. Traynowicz]
- Communication- Public Involvement Coordinator/Hwy. Commission Secretary [S. Kugler]
- Construction-Final Plans Coord. [Frank Brill]
- Materials & Research (2 copies) [M. Lindemann & B. Varilek through M. Syslo]
- Project Scheduling & Program Management (2) [A. Starr]
- Planning & Project Development- Div. Head (2) [B. Neemann]
- P & PD Scoping & Utilities Engineer [____________]
- P & PD Wetlands Mgr. [T Ringenberg]
- P & PD Roadside Stabilization Mgr [R. Poe]
- Right Of Way Manager [B. Frickel]
- ROW – Prop. Mgmt. Supervisor [T. Wicken]
- ROW - Relocation Assistance [G. Weinert]
- P&PD Planning & Location Studies Engr. [N. Salac]
- Rail & Public Transportation - Railroad Liaison (if applicable) [T. Palmer]
- Traffic Engineer [D. Waddle]
- FHWA (2 copies) [J. Werning] (if applicable) Include a copy of the PIH Plans with comments
- District (2 copies) - District Engineer
  - Project Manager
    - Include a copy of the PIH Plans with comments
- City or County (if applicable)
- Division of Aeronautics (if applicable)

Notify available in OnBase
- ROW Design Engr. [D. Foreman]
- ROW Division Chief Appraiser [D. Holland]
- ROW Division Project Mgr. [K. Svoboda]
- P & PD - EPU/EDU Administrative Assistant [L. Ellison]
- P&PD Environmental Section Mgr. [J. Jurgens]
- P & PD - Traffic Counter Shop [S. Stroud]
- RD - Lighting Engineer [C. Humphrey]
- Rail & Public Transportation - Railroad Liaison [T. Palmer]
Safety Enhancements

Examples of safety enhancements on a project:
This list is not an exclusive list -- other items may be added if appropriate.

- New driving surface
- Widened shoulders
- Surfaced shoulders
- Updated guardrail
- Lateral obstacle removal
- Widened bridges
- Updated bridge curbs
- Widened driving lanes
- Improved vertical alignment
- Improved horizontal alignment
- 6:1 foreslopes
- Improved drainage
- Updated signing
- Added lanes
- Left-turn lane
- Right-turn lane
- Lighting
- Channelization
- Shoulder rumble strip/edgeline stripe
- Centerline rumble strip
- Beveled edge
- Removed/Improved skewed intersections
- Signalized intersections
- Closing driveways on radius
- Improve safety at railroad crossings
- Separate bicycle paths
- Sidewalk/ Pathways
- Grade separation
- Remove parking
- Living snow fence
- Improved surfacing
- Curb ramps will be built
- Existing curb ramps will be upgraded to current ADA standards or rebuilt
Guidelines for Addressing Work Zone Safety and Mobility:
Identification of “Significant Projects”

A projects’ affect on the flow of traffic through the work zone is critical to the success of the project in the public’s perception. Projects which have the possibility of congesting traffic beyond acceptable delays may be considered a “significant project”. Note that only 3 projects in the 2007 fiscal year would’ve required this designation.

A project may be labeled “significant” because it is:

(A) Located within the boundaries of the Transportation Management Areas (TMA) of Omaha and Lincoln and the project is expected to occupy a location for more than three (3) days with either intermittent or continuous lane closures."

or

(B) 1. Project Characteristics - to include but not be limited to: project type, type of work zone (full closure, lane reductions, cross-overs, night work, etc.), project schedule, area type (urban, suburban, rural).
   2. Travel and Traffic Characteristics - to include but not be limited to: traffic volumes, seasonal and temporal variations, vehicle mix, type of travel (commuter, tourist, freight), public and private access, special events, impacts of weather.
   3. Work Zone Characteristics - to include but not be limited to: impacts on local and regional transportation networks, capacity issues, level of public interest, number of travelers impacted, expected safety impacts, expected delays, impacts on nearby commercial, public, and private facilities and properties.

or

(C) Because the District Engineer so designated it.

(For additional information see Section 4 of “Guidelines for Addressing Work Zone Mobility and Safety”).

This “Significant Project” designation requires:
- A decision at the Plan-In-Hand (PIH) & inclusion in the PIH Report.
- The Traffic Control Engineer will determine whether a project is “significant” or not prior to and reconfirm after the PIH & include the decision reached in the PIH report.

Public participation will be required when a project is declared a “Significant Project”. (For additional information see Section 5 of “Guidelines for Addressing Work Zone Mobility and Safety”).

**PS&E Turn-in Sheet:** Check the box reading “Work Zone Significant Project Spec. (final Plans)”. This means that the project will include a special provision that refers to a Traffic Control Plan and other items that will need to be taken care of during the project.
NEBRASKA DEPARTMENT OF TRANSPORTATION

GUIDELINES FOR ADDRESSING WORK ZONE MOBILITY AND SAFETY

JOHN CRAIG, DIRECTOR
MONTY FREDRICKSON, DEPUTY DIRECTOR – ENGINEERING
JOHN JACOBSEN, DEPUTY DIRECTOR – OPERATIONS

Nebraska Department of Transportation Mission Statement

“We provide and maintain, in cooperation with public and private organizations, a safe, reliable, affordable, environmentally compatible, and coordinated statewide transportation system for the movement of people and goods.”

In keeping with this mission statement, the Nebraska Department of Transportation is committed to developing, implementing, and improving these guidelines as a means to provide an adequate level of service and work zone safety for motorists and highway workers alike.
SECTION 1 – PURPOSE  
(23 C.F.R § 630.1002)

In keeping with the mission of the Department of Transportation, these guidelines for addressing work zone mobility and safety have been adopted so that reasonable effort is made --- from inception of the project to construction and final acceptance --- to accommodate the safety and mobility of all workers and travelers in our work zones for which the Department is responsible, including federal and local projects.

This guide was developed by a multi-disciplinary team including representatives of the Nebraska Department of Transportation and the Federal Highway Administration. This document is a guide and is intended for use as a resource document.

SECTION 2 – DEFINITIONS AND TERMS  
(23 C.F.R § 630.1004)

Design Process Outline (DPO) --- A summary of major activities (tasks or work categories) to be completed during the course of a project's design.

Highway Workers --- Include, but are not limited to, personnel of the contractor, subcontractor, NDOT, local agencies, utilities, and law enforcement, performing work within the right-of-way of a work zone.

Mobility --- The ability to move from place to place and is significantly dependent on the availability of transportation facilities and on system operating conditions. With specific reference to work zones, mobility pertains to moving road users efficiently through or around a work zone area with a minimum delay compared to baseline travel when no work zone is present, while not compromising the safety of highway workers or road users. The commonly used performance measures for the assessment of mobility include delay, speed, travel time, and queue lengths.

Safety --- A representation of the level of exposure to potential hazards for users of transportation facilities and highway workers. With specific reference to work zones, safety refers to minimizing potential hazards to road users in the vicinity of a work zone and highway workers at the work zone interface with traffic.

Significant Project --- Generally, a project, whether alone or in combination with other projects nearby, that may cause sustained work zone impacts on such things as capacity, delay times, levels of service, congestion, etc. that are greater than what is considered tolerable or desirable --- based on policy and/or engineering judgment.

Surveillance of Temporary Traffic Control Devices --- A contractor-managed pay item utilized to compensate the contractor for the continuous (24/7) monitoring and maintenance activities required in association with the work zone traffic control on the projects. Contractor employees assigned to these tasks require training and certification by the Contractor.

Traffic Control Plan (TCP) --- A plan used for facilitating road users through a work zone or an incident area.
Traffic Control Management (TCM) --- A contractor-managed pay item which normally requires three daily inspections of the work zone, monitoring of corrective action required, and documentation of the inspections made and corrective action taken. Contractor employees assigned to these tasks require training and certification by the Contractor.

Transportation Management Plan (TMP) --- An organized strategy to manage the work zone impacts of a project. Its scope, content, and degree of detail will vary depending on project requirements, these guidelines, and the anticipated impacts of the project on the traveling public.

Transportation Operations Component (TO) --- That component of a Transportation Management Plan (TMP) that identifies strategies that may be used to mitigate impacts of the work zone on the operation and management of the transportation system within the work zone impact area.

Work Zone --- An area within the right of way of a highway with construction, maintenance, or utility work activities. A work zone is typically marked by signs, channelizing devices, barriers, pavement markings, and/or work vehicles. It extends from the first warning sign to the END ROAD WORK sign. In the case of mobile operation it extends from the first warning sign or identifiable warning light to the last temporary control device.

Work Zone Crash --- A traffic crash in which the first harmful event occurs within the boundaries of a work zone or on an approach to or exit from a work zone, resulting from an activity, behavior, or control related to the movement of the traffic units through the work zone. This includes crashes occurring on approach to, exiting from or adjacent to work zones that are related to the work zone.

Work Zone Impacts --- Work zone-induced deviations from the normal range of transportation system safety and mobility. The extent of the work zone impacts may vary based on factors such as, road classification, area type (urban, suburban, and rural), traffic and travel characteristics, type of work being performed, time of day/night, and complexity of the project. These impacts may extend beyond the physical location of the work zone itself, and may occur on the roadway on which the work is being performed, as well as other highway corridors, other modes of transportation, and/or the regional transportation network.

Additionally, the Department includes the following acronyms in these guidelines:

AASHTO --- American Association of State Highway and Transportation Officials

ATSSA --- American Traffic Safety Services Association

CBD --- Central Business District

CFR --- Code of Federal Regulations

CMS --- Changeable Message Signs

DPO --- Design Process Outline

FHWA --- Federal Highway Administration

FR --- Federal Register

ITS --- Intelligent Transportation System
SECTION 3 - STATE-LEVEL PROCESSES AND PROCEDURES
(23 C.F.R § 630.1008)

(a.) Section Description

This section addresses the Department’s state-level processes and procedures for work zone assessment, work zone data, training, and periodic evaluations (process reviews).

(b.) Work Zone Assessment and Management

The Construction Division’s Final Plans Section reviews all plans for constructability, establishes time allowances, and estimates the signing quantities for each project. These tasks should be accomplished with consideration given to the standard or special traffic control plans developed by Traffic Engineering Division and any phasing plans developed by the Roadway Design Division. The Final Plans Section, in consultation with the Traffic Engineering Division, may make additions or deletions to the various plans when appropriate and necessary.

The Final Plans Section writes “Special Prosecution and Progress” specifications, when needed, which relate to traffic control. These special provisions address incentives/disincentives, internal District liquidated damages, peak hours, lane closures, and phasing required for the construction of the project where applicable.

This work is accomplished in collaboration with the District involved, the Roadway Design Division, and the Construction Division, by considering such factors as traffic volumes, anticipated delays, detour routes, the need to maintain two lanes of traffic on multilane facilities, and impacts to communities, schools, and emergency services.

Throughout the design process of a project, the Final Plans Section is available for project review to determine preliminary time allowances, assess constructability issues, and discuss phasing and traffic control. This preliminary review process is part of the Design Process Outline (DPO).
For projects that do not go through the Roadway Design Division (such as pavement rehabilitation projects generated in the Materials & Research Division), the Traffic Engineering Division determines the applicable standard or special traffic control plans. The Final Plans Section, in cooperation with the District and Traffic Engineering Division, determines the signing quantities, phasing, peak hours, or special prosecution/progress specifications that may be required.

The Department may utilize "Traffic Control Management" or "Surveillance of Temporary Traffic Control Devices" in addition to the standard and/or special traffic control plans. Each District, in cooperation with the Construction Division, determines whether to use "Traffic Control Management", "Surveillance", or just the normal traffic control methods provided by the Plans and Specifications. This determination is done just prior to the Final Plans Section review.

(c.) Work Zone Data

The Accident Records Section of the Traffic Engineering Division collects work zone crash data.

The Traffic Engineering Division summarizes the information received and processed by the Highway Safety Section and then prepares and distributes a Work Zone Accident Report Summary to the Districts on a monthly basis. The District project managers and other District staff are then expected to address any work zone mobility and safety issues by reacting to the Work Zone Accident Report Summary and making field observations of travel speed, delays, and other factors which might affect travel through the work zone.

Whenever the District's review and analysis of the work zone and Work Zone Accident Report Summary identifies opportunities for improvement or results in positive changes to work zone safety and mobility, the nature of the findings or improvements are communicated to the Traffic Engineering and/or Construction Divisions, or others as appropriate.

Additionally, the Department utilizes work zone crash data as one of its own performance measures. The work zone crash data shall be available for use during work zone process reviews and used as a tool to improve traffic control plans and guidelines.

(d.) Training

The Department currently generates the forms used to report crash data and provides to law enforcement some limited training on the proper and consistent collection of work zone crash data. The Department monitors the crash data being collected and pursues additional training for law enforcement if it is deemed necessary by the Department.

The Department provides appropriate training for employees involved in the development, design, implementation, management, and inspection of work zone-related transportation management and traffic control. The Department to the extent practical maintains a record of required training provided and provides appropriate training updates when necessary. Additionally, the Department will provide other training when necessary by the Department or the Federal Highway Administration (FHWA).

The Department selects training which is compatible with the needs involved and the class and position of employees to be trained. The Department avails itself of on-the-job training by peers and supervisors, electronic media presentations, and large and small group presentations, or at informal safety meetings.
Department personnel actively involved in the workzone (project managers, key inspectors, etc.) are encouraged to complete flagger and Assistant Traffic Control Manager certification training.

District personnel involved in the review and analysis of the monthly Work Zone Accident Report Summaries and District personnel responsible for implementing and monitoring the Traffic Management Plan on a significant project will, when available, attend American Traffic Safety Services Association (ATSSA) training for Traffic Control Technicians or Traffic Control Supervisors. Certification from ATSSA is not required.

Additionally, for positions or circumstances requiring more formal training, the Department will either provide appropriate in-house training or arrange for training which may be available from the Federal Highway Administration, (including National Highway Institute), ATSSA, or other outside training sources as needed.

When appropriate, the Department will make its training available to contractors.

By specification, the Department requires training and certification of contractor employees utilized as flaggers. The Department enforces the specification and provides training and certification materials as appropriate.

When provided in the Proposal, the Department requires that the contractor assign an individual as a Traffic Control Manager. Assistant Traffic Control Managers may be assigned and utilized by the contractor to perform required tasks on the project. The Department establishes training and certification requirements for Traffic Control Managers and Assistant Traffic Control Managers, enforces the specifications and provides training and certification materials as appropriate.

The Department utilizes Traffic Control Management or a similar level of traffic monitoring on significant projects. In so doing, the contractor's designated Traffic Control Manager will have received training in the implementation and monitoring of the Traffic Management Plan.

The Construction Division maintains (for the period of their respective certifications) a database of individuals (non-NDOT employees) who have been trained, certified, and reported as having completed the training and certification requirements for Flaggers and Assistant Traffic Control Managers. The Human Resources Division maintains a database of Department employees who have received flagger training.

(e.) Process Reviews

The Traffic Engineering Division, in partnership with the FHWA, conducts an annual statewide work zone inspection and process review. Construction and appropriate District personnel may be included in the reviews.

Observations made during the inspection and process review are summarized and analyzed by the Traffic Engineering Division and then shared with the Districts involved. The information is used to evaluate current work zone procedures and make recommendations for improvements.

Additional process reviews may be conducted in concert with the FHWA when deemed necessary.
SECTION 4 – SIGNIFICANT PROJECTS
(23 C.F.R § 630.1010)

(a) Acknowledgement of Significant Projects

The Department acknowledges that some projects, whether alone or in combination with other concurrent projects nearby, may cause sustained work zone impacts that are greater than what is considered tolerable or desirable --- based on policy and/or engineering judgment. These projects shall be identified as “significant projects”.

(b.) Identification of Significant Projects

A project is considered a "Significant Project" when it will impede traffic by closing lanes for several days, or restricting width to the point that it slows traffic enough to cause delays and as described below.

Based on their experience and considering the criteria identified in 630.1010 (c.) below, each District Engineer identifies on the DR Form 73, Highway Improvement Programming Request, their recommendation as to whether a programmed project should be significant.

The Project Scheduling & Program Management Section, in consultation with the District Engineer and other Divisions and by evaluating one or more of the criteria referenced in 630.1010(c), shall make the initial determination of whether a project is to be identified as a "significant project" as it relates to Subpart J of 23 CFR Part 630.

A final determination of significance shall be made during the Plan-in-Hand inspection.

(c.) Criteria for Identification of Significant Projects

In addition to other projects that may qualify, the Department shall identify all projects on the Interstate System that are located within the boundaries of the Transportation Management Areas (TMA) of Omaha and Lincoln as “significant projects” if they are expected to occupy a location for more than three (3) days with either intermittent or continuous lane closures.

The TMA limits for Omaha include all of I-680, all of I-480, and that portion of I-80 between Highway N-50 and the Missouri River. The TMA limits for Lincoln include all of I-180 and that portion of I-80 from 1 mile west of the NW 48th Street Interchange to 98th Street (1 mile west of the Waverly interchange). These limits are current as of 2007, but are subject to periodic review. The Metropolitan Area Planning Agency (MAPA) or the Lincoln/Lancaster County MPO should be consulted to verify the current TMA limits for Omaha and Lincoln.

Additionally, using the following criteria, the Department, including the District Engineer’s initial assessment, will review other non-Interstate projects on the freeway or expressway system, projects located in a central business district or a major metropolitan area, and any other major projects to see if their work zone impacts are expected to be greater than what is considered tolerable. These projects may also be identified and treated as “significant projects”.

7
Potential Criteria for Assessing the "Significance" of a Project:

1. **Project Characteristics** --- to include but not be limited to: project type, type of work zone (full closure, lane reductions, cross-overs, night work, etc.), project schedule, area type (urban, suburban, rural).

2. **Travel and Traffic Characteristics** --- to include but not be limited to: traffic volumes, seasonal and temporal variations, vehicle mix, type of travel (commuter, tourist, freight), public and private access, special events, impacts of weather.

3. **Work Zone Characteristics** --- to include but not be limited to: impacts on local and regional transportation networks, capacity issues, level of public interest, number of travelers impacted, expected safety impacts, expected delays, impacts on nearby commercial, public, and private facilities and properties.

(d.) Exceptions

When the Department's analysis of a project on the Interstate System indicates that the work will not cause sustained work zone impacts, though otherwise meeting the criteria identified in 4c., the Department may request from the FHWA an exception to the applicability of 5b.2 and 5b.3 by showing that the project does not, in fact, cause sustained work zone impacts.

**SECTION 5 – PROJECT LEVEL PROCEDURES**

*(23 C.F.R § 630.1012)*

(a.) **Section Description**

This section provides guidance and establishes procedures to manage the work zone impacts of individual projects.

The Department addresses the traffic concerns on the Plan-In-Hand. While some Interstate projects can maintain two lanes of traffic, the majority of projects maintain one lane of traffic. Some projects use detours or phasing to maintain traffic at acceptable levels.

(b.) **Transportation Management Plans – Mandate for Significant Projects**

For projects determined to be significant, the Department will develop a Transportation Management Plan (TMP) which consists of a Traffic Control Plan (TCP), a component to address Transportation Operations (TO), and a component to address the dissemination of Public Information (PI). In general, the construction project manager is designated as being responsible for monitoring the TMP.

For individual projects or classes of projects determined not to be significant, only a TCP is required. However, TO and PI components may be considered and utilized on any project.
(b.1.) Traffic Control Plans

The Department prepares a TCP for every project where traffic is affected. TCP's are consistent with the applicable provisions of the MUTCD, and the AASHTO Roadside Design Guide.

The selection of standard TCP's and any special plans are made by the Traffic Engineering Division and submitted to the PS&E Section for inclusion in the project plans. Standard and special plans included in the contract documents may be modified or supplemented by other site-specific plans prepared by the District Highway Project Manager (or a designee).

The project TCP, as described above, addresses phasing when appropriate and is updated and modified when circumstances dictate. On relatively simple and uncomplicated projects, the project manager may find it sufficient to utilize only the standard and special plans (if any) provided in the contract documents.

In the case of existing obstacles adjacent to the traveled way which may be encountered or affected during construction, the obstacles will be reviewed in regard to the posted speed, traffic volumes, and the length of time the obstacle may present a hazard in accordance with the Roadside Design Guide and a cost/benefit analysis. Based on the review, obstacles will then either be left in place, delineated or shielded as appropriate for the project.

(b.2.) Transportation Operations (TO) Component

Transportation Operations

On projects that have been determined to be significant, Transportation Operations (TO) strategies will be considered throughout the design process. The TO component of the TMP will include strategies that will be used to mitigate the impacts of the work zone on the operation and management of the highway system within the work zone impact area.

Transportation Operation strategies may include, but are not limited to:

1. Demand management,
2. Corridor/network management,
3. Work zone safety management, and
4. Traffic/Incident Management and Enforcement

The scope of the TO component will be determined by the project characteristics and the transportation operation and safety strategies identified by the Department.

1. Demand Management Strategies

Demand management strategies include techniques intended to reduce the volume of traffic traveling through the work zone by such methods as diverting travelers to alternate modes of transportation, shifting trips to off-peak hours, or shifting vehicles to alternate routes. When determining strategies to be used, the following may be considered:

- Transit Services – improvements, incentives, shuttles, residential/carpool, park and ride
- Ramp Metering, ramp closures
- Variable work hours; telecommuting
2. Corridor/Network Management Strategies

Corridor/network management strategies include strategies to optimize traffic flow through the work zone and adjacent roadways. The following traffic operations techniques and technologies may be considered:

- Maintaining existing number of through lanes
- Designing crossovers/shooflies for posted or 85th percentile speed
- Utilizing off-peak work hours
- Utilizing temporary traffic signals; monitoring signal timing/coordination
- Utilizing roadway/intersection improvements; turn lanes, bus turn outs
- Implementing traffic restrictions; turns, parking, trucks
- Implementing lane restrictions; trucks, reversible lanes
- Monitoring railroad crossing controls
- Coordinating with adjacent construction sites
- Utilizing automated work zones; detection systems, changeable message signs, highway advisory radio, web page, 511
- Various computer computations analyses (such as traffic modeling, Quickzone, etc.)

3. Work Zone Safety Management Strategies

Work zone safety management strategies include devices, features, and management procedures used to address traffic safety issues in the work zone. Work zone safety management strategies include:

- Reasonable speed limits through work area
- Temporary traffic signals
- Temporary traffic barriers – concrete protection barriers
- Impact attenuators/crash-cushions
- Intrusion alarms – warning lights
- Project task force/committee
- Work zone traffic control supervisors/inspectors
- Project partnering – weekly meetings
- Peer-to-peer work zone reviews
- Windshield surveys, night-time reviews

4. Traffic/Incident Management and Enforcement Strategies

Traffic/incident management and enforcement includes various strategies to manage work zone traffic operations. Work zone traffic management strategies involve monitoring traffic conditions and making adjustments to traffic operations based on changing conditions. Strategies in this area include:

- Automated work zones, traffic monitoring
- Transportation management centers, District Operations Centers
- Detecting and monitoring traffic for speed, volume, and density
- Traffic screens, glare screens
- Enhanced Reference Post markers
- Quick removal policies, push bumpers, hi-tech accident documentation
- Coordination with media
- Local detour routes
- Contract support for incident management
- Incident/emergency management coordination and response planning
• Utilizing automated work zones; detection systems, changeable message signs, highway advisory radio, web page, 511
• Law enforcement – cooperative, dedicated, or overtime
• Double fines for speeding

The strategies identified above are not all inclusive. Other strategies may be used.

While the Department is committed to implementing the appropriate strategies listed above on all projects determined to be “significant”, many of these strategies may be implemented on other projects having a "less significant" impact on work zone safety and mobility.

(b.3) Public Information (PI) Component

The Department makes a conscious effort to gather and share information regarding current and future projects with the public.

For projects identified as being "significant", the individual Districts take the lead in advising the Communication Division that the project is likely to be significant and that some special efforts may be needed to enhance the distribution of public information. The Districts provide as much lead time as possible.

The Department, through collaboration with other agencies, considers one or more of the following strategies when establishing a public information plan for an individual project. Each project is considered on its own merits in evaluating the types of strategies utilized and the extent to which resources are expended on them.

• Participation in National Work Zone Awareness Week activities.
• Maintenance of the Department of Transportation website. (The website is available to disseminate information both prior to and after the letting of a project.)
• Publication and distribution of various printed materials (flyers, doorhangers, newsletters, special mailings, etc.)
• Issuance of news releases to the media
• Placing project information on the “511” system.
• Conducting public information meetings at scheduled times throughout the life of a project.
• Deploying and employing various ITS options (e.g. Dynamic Message Signs).
• Utilizing paid advertising in the media, when justified and appropriate (this would include both print and electronic media).
• Utilizing free media advertising when available.
• Establishing a project-specific “hot line” when appropriate.
• Participate in public outreach whenever possible and appropriate (appearances at organizational meetings, public gatherings, etc.)
• Develop project-specific art work and graphics to identify special projects.

The individual Districts responsible for the projects involved, along with the Communication Division, monitors the results of the public information effort by surveying Department personnel and affected local agencies and individuals. Public information strategies may be modified as necessary.
(b.4.) Implementation of TMP with Stakeholders

The Department seeks the input of and keeps all affected agencies and individuals aware of the key details in the TMP and also encourages their continued involvement in the process.

It is understood that the actual list of stakeholders identified for any project will be unique, and it is not possible to outline the make-up of the list until the project is developing. However, the Department maintains a role in the functioning of the transportation management teams in the Omaha and Lincoln areas providing an ongoing involvement in the development of TMPs affecting most significant projects.

Current Inter-Agency Transportation Management Teams:

1. The Omaha “Transportation Systems Management” (TSM) Committee is represented by engineers and managers from the Nebraska Department of Transportation District and Central headquarters; Nebraska State Patrol; the City of Omaha Public Works Department, Police, Fire, and Transit Divisions; Douglas County and Sarpy County; Omaha Public Power District (OPPD), FHWA and the Metropolitan Area Planning Agency (MAPA). This group meets quarterly to discuss, coordinate, and mitigate the impact of road construction projects scheduled by the various jurisdictions. The TSM committee is led by the District 2 Office of the Nebraska Department of Transportation.

2. The Lincoln “Transportation Liaison Committee” (TLC) is represented by engineers and managers from multiple agencies in the Lincoln area. Included in this committee are representatives from the Nebraska Department of Transportation, District and Central Headquarters, FHWA, the City of Lincoln Public Works, Lancaster County and the Lincoln Electric System (LES). This committee meets bi-annually to discuss, coordinate, and mitigate the impact of road construction projects scheduled by the various jurisdictions. The Lincoln TLC is led by the City of Lincoln.

(c.) PS&E Requirements for TMP

The Department is responsible for the TMP. Contractors shall not be responsible for its development.

The Department identifies in the contract Proposal that the project is significant, and or identifies specific components of the TMP that are required for the project. Special provisions, special plans, and references to other pertinent documents are considered part of the TMP even if not separately identified and labeled as such. Items in the TMP that are the Department’s sole responsibility are not included in the Proposal.

(d.) Method of Payment

In general, the Department utilizes method-based specifications for traffic control items. The Department’s Standard Specifications do contain some isolated guidance that could be construed as “performance-based” (e.g., a pilot car is expected to make a round trip through a construction zone in 15 minutes). However, the Department utilizes individual pay items in the contract to pay for traffic control operations and devices. In some instances, payment for certain devices may be made subsidiary to others. For example, payment for the standard set of warning signs required for a flagging operation is subsidiary to the pay item, “Flagging.”
Unless some project-specific special circumstances dictate, no specific items will be established
to pay for implementation of the TMP. It is the Department’s practice that payment for individual
traffic control devices and for items such as “Traffic Control Management” provides the
necessary compensation.

(e.) Designation of Responsible Persons

Unless special circumstances dictate, the NDOT Project Manager assigned to the construction of
a project has the primary responsibility for implementing and monitoring the TMP. The Contractor
shall identify, prior to construction, to the Department’s Project Manager the individual(s)
responsible for guaranteeing that the contractor’s responsibilities under the TMP are properly
and promptly carried out.

SECTION 6 – IMPLEMENTATION
(23 C.F.R § 630.1014)

The Department acknowledges that its implementation of these guidelines is subject to review
and reassessment annually. The Department is working in partnership with the FHWA Division
office to implement its policies and procedures to improve work zone safety and mobility.

A copy of this document, or revised and amended copies thereof, shall be addressed in
stewardship agreements with the FHWA.

SECTION 7 – COMPLIANCE DATE
(23 C.F.R § 630.1016)

As of October 12, 2007 these guidelines shall be applied to all projects.

For projects that are in the final stages of development on or about October 12, 2007 and for
which it can be demonstrated that complete compliance with these guidelines would create a
significant negative impact upon their delivery, the Department agrees to request a variance, on
a project-by-project basis, from the FHWA.

Recommended:

[Signatures]

Approved:

[Signatures]
Guidelines for Public Meetings

Project No.:  
Control No.:  
Flight No.:  

Location:  
Date of Flight:  
Altitude:  

Unit Head:  
Designer:  
Design Technician:  

We would like to hold the Public Hearing on or about [ ]  
The dry run should be held 6 weeks prior to the date of the Public Hearing  
The pre-dry run should be held approximately 10 days prior to the date of the Dry Run  
Start the hearing preparation about 1 month prior to the pre-dry run. This meeting should be held before the PowerPoint slides have been setup. (Use hard copies to review.) The Unit Head, Designer, and the Design Technician should attend the Pre-Dry Run.  

Note: This means getting everything ready to go 3 months prior to the Public Hearing Date.

MOSAIC  
Aerial Photos should be less than 2 years old at the time of the hearing, and represent current conditions, unless otherwise approved by the Unit Head.  
The photos should be taken at an altitude of 4800’ or less (large mosaic scales requires lower flights). If new flights are required, time must be allowed to schedule, fly, process, and scan the photos. Allow approximately 6 months for adverse weather and ground conditions.  
Please consider the length of the project, complexity of the design and the sensitive nature of some items that may be disturbed. Try to keep the mosaic for Rural Projects under 20’, ideally between 12’ and 15’. For Urban areas, length is not the problem but if you use too large a scale the aerial display will be grainy. Make sure the scale of the display is the first thing that is discussed.  
The mosaic scale will be 1” = 200’, 1” = 100’, or 1” = 50’ (1” = 20’ is seldom used).  

Show the following items as indicated (to be determined by the Designer).  

Slides Mosaic □ PowerPoint  
□ Proposed Roadway (edge of pavement, surfaced, and nonsurfaced drives and intersections)  
□ Legend, keep it simple.  
□ Labels, Highway, Streets, County Roads, Creeks/ Rivers, Railroads, Businesses, (Section, Township, Range on Rural Projects Only)  
□ North Arrow (usually North to the top or increasing stationing left to right)  
□ Bridges (excluding - culverts and driveway culverts)  
□ Driveways and Intersection (including those that are to be closed)  
□ Surfaced Shoulder (usually shown)  
□ Retaining / MSE Wall  
□ Barrier Curb  
□ Sidewalks  
□ Limits of Construction (LOC’s) Lines (Not Text)  
□ Buildings to be removed  
□ Right of Way – Property, Section & ¼ Section lines, Corporate limits, & Property Owners (usually shown)  
□ Project Station Numbers (usually 5’s or 10’s)  
□ Project Centerline (optional)  
□ Roadway Obliteration  
□ Wetlands – Impacts and Potential Mitigation Sites  
□ Drainage Structures/ Driveway Culverts (usually not shown)  
□ Construction Phasing, if applicable (not shown on mosaic but typical sections may be shown)  
□ Other:  
□ Other:
Special Instructions:

**Labeling**: Label items that are mentioned in the hearing statement but not shown on the legend. Example: Temporary surfacing or future projects, etc.

**Rural Projects**: Normal slide coverage is 0.5 mile. A lengthy project that does not have much to talk about could go to 1 mile per slide. If 1 mile per slide is used remember to double the size of text, labels and scale. Remember other details are not going to show very well on the slides.

**Urban Projects**: Normal slide coverage is 1 to 3 blocks per slide, depending on the amount of detail that needs to be shown.

**Note**: Do not mix scales at random. Use 1 scale for Rural and 1 scale for Urban or enlarged slide for showing more detail.

- **TITLE**: Project Name, No., Location, and Time of the hearing
- **LOCATION MAP**: Note where the Project Begins, Ends and Route (Enlarge Highway No. & County Names) Tone down Sections/Co. Rds. on Rural projects and Streets on Urban Projects so they are not so busy and distracting
- **PHOTOLOG**: If Applicable *(to be determined by Designer and Unit Head)*
- **TRAFFIC COUNT**: Current Year (ex. 2005) 20 Years After the initial year of construction (ex. 2028)
  - Cars Per Day
  - % Trucks
- **ACCIDENT STATISTICS - Not included.**
- **TYPICAL CROSS SECTIONS**: Only Show 1-Typical Section per Slide
- **LEGEND**: Keep it simple. *(determined by Designer and Unit Head)* Please confer with the Design Technician, as some colors do not read well.
- **AERIALS**: Photos should not be more than 2 years old *(unless otherwise approved by the Unit Head).*
- **DETOUR MAP**: Show similar to Location Map. Note where detour begins, ends, and route. Enlarge Highway Numbers, County Names, and the appropriate labeling.
- **ESTIMATED PROJECT COST**: Include the city’s share of project cost *(if required - determined by Designer and Unit Head).*
- **CLOSING**: Do you want a closing slide?
Public Meeting Checklist

☐ Send the Highway Commission a Preliminary Hearing statement from the dry run.
☐ Schedule a meeting with the City Council prior to the dry run.
☐ Engineering Statement should note previous Public Hearing or Information Mtg.
☐ Mosaic placed on the internet (timing determined by Dist. Engineer & ADE).

☐ 1. Laptop, Copy of PowerPoint on CD (jump drive etc.) and extension cord. Check with the Public Involvement Coordinator on the extension cord.
☐ 2. Displays - Mosaic - Extra North Arrow…Etc. - Tape & X-acto knife to fix Mosaic
☐ 3. Tape & scissors to hang display
☐ 4. Box of long pins to hang display on cork-board
☐ 5. Plans – 4 full and 2 half-size sets
  ☐ 2A’s, Plan & Profile, & X-Sections.
☐ 6. ROW Plans (As-built ROW plans if ownership plans are unavailable)
☐ 7. Correspondence file
☐ 8. Copies of Environmental Impact Study (EIS)
☐ 9. 9x9 Air photos (include stereo and magnifying glasses)
☐ 10. 10 extra copies of the hearing statement
  ☐ a. Send District Engineer a copy - prior to hearing
  ☐ b. Send Highway Commission Secretary a copy
  ☐ c. Send Hearings Officer a copy
  ☐ d. Send Consultant a copy
  ☐ e. Media

☐ 10. Fact Sheet – Receive from Public Involvement Coordinator (S. Kugler)
☐ 11. Engineer’s Scale (large and pocket)
☐ 12. Calculator
☐ 13. Triangles
☐ 14. Note pad
☐ 15. Red & regular pencil and eraser
☐ 17. A Policy on Geometric Design of Highways and Streets (Green book)
☐ 20. Turning templates
☐ 21. Circle/ radius templates
☐ 22. Pocket name tag and business cards
☐ 23. Pointer
☐ 24. Pen flashlight
☐ 25. Nebraska Minimum Design Standards
☐ 26. NDOT “Surface Transportation Program Book” (1-year and 5-year plan)
☐ 27. Traffic flow map (from Transportation Planning)
Exhibit M
April 7, 2016

Public Hearing - Dry Run Invitation List

Do not schedule the Public Hearing until after the dry run is completed. Others may be invited when appropriate.

- Kyle Schneweis (Director)
- Khalil Jaber (Deputy - Engineering)
- Moe Jamshidi (Deputy - Operations)
- Jill McAuliffe (Administrative Assistant - Director’s Office)
- Verneda Kelly (Administrative Assistant - Director’s Office)
- * Mike Owen (Roadway Design - Division Head)
- Kevin Donahoo (Roadway Design - Hydraulic Engr.)
- Jodi Kocher (Hydraulic Unit Head)
- Julie Wells (Environmental Liaison Engr.)
- Phil TenHulzen, (Roadway Design - Standards Engineer)
- Lorraine Legg (Assistant Design Engineer)
- Chris Lutz (Unit Head - Expressway)
- Toby Fierstein (Unit Head - Expressway)
- Doug Pillard (Design Consultant Coordinator)
- Terry Gibson (Assistant Design Engineer)
- Brian Johnson (Unit Head - Interstate)
- Jeff Johnston (Unit Head - Interstate)
- Nathan Sorben (Assistant Design Engineer)
- Pat Brunken (Hwy. Design Plans Manager)
- John Thomas (Assistant Design Engineer)
- Tyler Schmidt (Unit Head - Resurfacing)
- Carl Humphrey (Lighting/Urban Engineer)
- Syed Ataullah (Assistant Design Engineer)
- Tony Kessler (Design Consultant Coordinator)
- Kevin Krolikowski (Unit Head - Rural)
- Brendon Schmidt (Unit Head - Rural)
- Amy Starr (Project Scheduling & Program Management)
- Manager - Communication
- Sarah Kugler (Public Involvement Coordinator/Highway Commission Secretary)
- Dan Waddle (Traffic Division Head)
- Jim Knott (Construction Division Head)
- Brandie Neemann (Planning & Project Development (P&PD) - Division Head)
- Noel Salac (P&PD- Location Studies Engineer)
- Randy ElDorado (P&PD - Agreements Engineer)
- Jason Jurgens (P&PD - Environmental Section Mgr.)
- Tony Ringenberg (P&PD - Highway Wetlands Manager)
- Jon Barber (P&PD - Environmental Analyst Supervisor)
- Manager - Scoping & Utilities Engineer
- Mark Traynowicz (Bridge Division Head)
- Bob Frickel (ROW Division Head)
- Dan Foreman (ROW Design Engineer)
- Ryan Huff (Rail and Public Transportation Engineer)
- Mick Syslo (Materials and Research Division Head)
- Mark Osborn (Roadway Asset Mgmt. Engineer)

Contact the District Engineer before scheduling the Dry Run and ask if he/she is interested in attending. Schedule the dry run accordingly.

* When scheduling the dry run, make sure the people with an * are available, include your Assistant Design Engineer.

Outlook Address: DOT RD-Dry Run
PROJECT STATEMENT
FOR THE STATE HIGHWAY COMMISSION MEETING
HELD ON

THE NEBRASKA DEPARTMENT OF TRANSPORTATION IS REQUESTING APPROVAL OF THE (LOCATION, DESIGN FEATURES, ACCESS CONTROL, ETC.) FOR:

PROJECT NO.
LOCATION:
CONTROL NO.

THE PROJECT IS LOCATED IN COUNTY ON HIGHWAY, IT BEGINS AT MILE POST AND EXTENDS FOR MILES.

BASED ON CURRENT PRICES THE ESTIMATED PROJECT COST IS $.

THE PROPOSED IMPROVEMENT WILL INCLUDE .

ADDITIONAL RIGHT-OF-WAY BE NEEDED.

RELOCATION BE NECESSARY.

RECLASSIFICATION AND RELINQUISHMENT OF SEGMENTS OF THE EXISTING HIGHWAY BE NECESSARY.

ACCESS CONTROL BE REQUIRED.

AN OPPORTUNITY FOR A PUBLIC HEARING WAS OFFERED BUT NO REQUESTS WERE RECEIVED.

OR

AN OPPORTUNITY FOR A PUBLIC HEARING WAS OFFERED, RECEIVED, LATER WITHDRAWN.

A DESIGN PUBLIC HEARING WAS HELD ON IN , NEBRASKA. THE PROJECT RECEIVED SUPPORT AT THE HEARING.

Note: Do not reference the hearing display until you have completed the above in a prepared statement, then work though the hearing display with project specific issues.

Note: Include 8.5" x 11" Location Map when this is sent to the Highway Commissioners before the meeting.

Note: Request that the Executive Secretary of the Highway Commission send a notice to the local government(s) informing them of the Highway Commission Meeting.
FACT SHEET

PROJECT NO.
LOCATION:
CONTROL NO.

1. Traffic
   Average Daily Traffic
   Design Hourly Volume
   % Heavy Trucks

2. Design:
   Roadway Width
   Median Width
   Shoulder Width
   Shoulder Surfacing
   Obstacle Clearance

3. Right-of-Way:

4. Relocation:

5. Lighting:

6. Project Cost: $

7. Presently Programmed for Fiscal Year: 20

8. Adjoining Project(s):
   To
   To
Earthwork Checklist
See Chapter 7 of the RDM

Existing Surfacing - will it be removed, salvaged, or incorporated in the fill? Check with Materials and Research and the District Construction Engineer about payment for stockpiling and salvaging.

Undercut (Determination of Subgrade Elevation) - Account for surfacing, foundation course or soil aggregate base course. Compensate for shoulder material if necessary.

Balance Factor - Verify with DE or PIH report. Try to balance every mile.

Subgrade Slope on Shoulders - Same slope as driving lanes on full grading projects.

Subgrade on Superelevated Section - Verify against appropriate standard plan. Does the shoulder surfacing have a maximum 7% rollover?

Transitions to Superelevation - Does the roadway and shoulder superelevate properly - check transition distances.

Design Exceptions at Bridges - Does earthwork taper from abutment to flow line as designed by the bridge designer?

Roadway Cross-Sections - Are the slope break points at the appropriate locations?

Special Ditches – Shown on P&P sheets? When the ditch bottom is lower than the normal hinge point, verify that the 6:1 foreslope continues to the hinge point, and then breaks to a 4:1 or 3:1 at the required distance from centerline.

Intersections & Driveways - 10:1 transverse slopes within the clear zone? Do the foreslopes correspond to the criteria shown on plan “Typical Cross-Sections Rural Intersections and Driveways” (Standard/Special Plans Book). Pipe lengths match driveway slopes?

Guardrail Locations - Shoulder slope to 2’ behind the surfacing & 5’ beyond the last post. Transition the earthwork behind the guardrail from foreslope to bridge design.

Sand Barrel/ Concrete Barrier Placement - Check with Traffic Division for details of barrier placement.

Dikes - Are intercepting dikes shown on the cross-sections & sloped at 10:1 facing traffic within the clear zone? (Normally, embankment required for a dike is not multiplied by the balance factor).

Phasing – Show on cross-sections and earthwork for each phase.

Temporary Drainage – Check drainage for each phase.

Detours, Temporary Roads - Will grading for temporary roads or detours be required?

Borrow/ Waste Areas - Are these areas to be delineated or is it the contractor’s responsibility if borrow is along the project.

Channel Changes - Determine if excavation should be included with the total excavation or split out as “channel excavation”; this is determined on a case-by-case basis.

Surcharges/Settlement - Check with Materials & Research Geotechnical Engineer.

Shoulder Construction/ Urban Areas - Do the cross-sections show the shoulder construction according to policy?
Final Plans Checklist -

- A. Earthwork (balance points and quantities)
- B. Borrow pits
- C. Utility note
- D. Earthwork Blends at:
  - 1. Project ends
  - 2. Intersections & Drives
  - 3. Temporary Roads
- E. Special provisions
- F. Computations
- G. Sketches for construction items:
  - 1. Temporary Roads or Detours
  - 2. Dikes
  - 3. Culverts
  - 4. Borrow pit sites
- H. Cross-sections:
  - 1. Scale
  - 2. Ditch bottom elevations
  - 3. ROW
Preliminary R.O.W. Plan Review Meeting  
(Clarity Task 5610)

Attendees List:

<table>
<thead>
<tr>
<th>Attendance Required:</th>
<th>Invite, Attendance Not Required:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistant Right-of-Way Manager or Chief Appraiser (One or the other)</td>
<td>Roadway Design Division Engineer</td>
</tr>
<tr>
<td>Right-of-Way Design Engineer</td>
<td>Affected Assistant Design Engineers in Roadway Design Division</td>
</tr>
<tr>
<td>Unit Head</td>
<td>Utilities Section Coordinator</td>
</tr>
<tr>
<td>Supervisor</td>
<td>Right-of-Way Design Supervisor</td>
</tr>
<tr>
<td>Utilities District Coordinator</td>
<td>Lighting Design Engr. (if applicable)</td>
</tr>
<tr>
<td>Railroad Liaison (if RR is impacted)</td>
<td>P&amp;PD Environ. Section Manager (if applicable)</td>
</tr>
</tbody>
</table>

Checklist of ROW items to be reviewed:

- [ ] Lateral clearance
- [ ] Utilities
- [ ] Wetlands
- [ ] Access Control
- [ ] Borrow areas
- [ ] Minimum of 2’ behind Sidewalks
- [ ] Overall ROW: Excessive or Tight
- [ ] Drives: Construction area
- [ ] Culverts: Construction & Cleanout
- [ ] Temp. LOCs: Drive/ Temp. Road
- [ ] Lighting
- [ ] Traffic Signal Location
- [ ] Guide Signs
- [ ] Impacts to Home/ Building/ Tree
- [ ] LOC for Rip-Rap/ Erosion Control
- [ ] Railroad Easements
- [ ] Fill slope/ ditch bottom on our ROW?
- [ ] Room for the contractor to maneuver around a construction site
- [ ] ________________

Document the decisions made and the responsible party, send to attendees and the Assistant Design Engineer.
Plans To Utilities

(Clarity Task 5614)

The Roadway Designer shall request that PDU plot the Utilities Plans. The plans sent to the Utility Coordinators will have sufficient detail for the utility companies to determine the impact to facilities (include 2L sheets if necessary to provide sufficient detail).

Roadway Design shall provide the most up-to-date details for, but not limited to:

1. Horizontal alignment
2. Vertical alignment
3. Drainage structures
4. Roadway cross sections
5. Culvert cross sections
6. Special designs (if there is utility involvement)
7. Detours, temporary roads, crossovers (final)
8. Frontage roads, side roads, etc.
9. Project location map
10. Limits of construction from project centerline to be used
11. Driveways and other accesses
12. Ditches (includes special ditches)
13. Sidewalks, bike trails
14. Medians, curbs and gutters, etc.
15. Embankment widening for guardrail installations
16. Dikes, dams, etc.
17. “Do Not Disturb” environmental areas
18. Wetlands mitigation
19. Removals
20. Driveway culverts
21. Lighting
22. Traffic signals
23. Overhead signs (include foundations)
24. Bridges & pedestrian structures
25. Retaining walls (approximate height and location including generic earth retaining wall)
26. All above and underground utility facilities (power, telephone, pipelines, gas, cable, TV, etc.)
27. Above ground utility structures (telephone poles, power poles, telephone pedestals, power pedestals, manholes, etc.) must have the station and offset from the centerline to be used.
28. Centerline crossing station of all underground pipelines.
Airway Highway Clearances

The Federal Aviation Administration’s (FAA) regulations for airway highway clearances (http://www.faa.gov/airports/central/engineering/part77/) have been published as "Part 77, Federal Aviation Regulations". The Federal Aviation Administration requires written notification prior to construction in the vicinity of an airport in order to:

- Evaluate the effect of the proposed construction or alteration on the operation of the airport
- Determine the effect of the proposed construction or alteration on air navigation
- Identify mitigating measures
- Map the alteration

If required, FAA Form 7460-1, “Notice of Proposed Construction or Alteration”, must be filed with the FAA at least 30 days before work starts and should be filled out during the Plan-in-Hand Phase of the project (Clarity Task #5380). All modifications, both permanent and temporary, are subject to the notice requirement. The designer will transmit this form to the Nebraska Division of Aeronautics for coordination with the FAA. This form may be found on the Internet at (http://www.faa.gov/documentLibrary/media/form/faa7460_1.pdf).

The Nebraska Division of Aeronautics should be consulted early in the design process for current regulations and notification requirements related to highway projects near civil and military airports and heliports and for information on future growth planned at the airport.

Conditions requiring the filing of FAA Form 7460-1:

- Any construction or alteration exceeding 200 ft. above ground level
- Any construction or alteration
  - Within 20,000 ft. of a public use or military airport which exceeds a 100:1 surface from any point on the runway of each airport with at least one runway more than 3200 ft. in length
  - Within 10,000 ft. of a public use or military airport which exceeds a 50:1 surface from any point on the runway of each airport with its longest runway no more than 3200 ft. in length
  - Within 5000 ft. of a public use heliport which exceeds a 25:1 surface
- Any highway, railroad, or other transverse way whose prescribed adjusted height would exceed that above noted standards
- When requested by the FAA
- Any construction or alteration located on a public use airport or heliport regardless of height or location

Examples of Permanent Construction or Alterations:

- Structures
- Elevated Signs
- Fences
- Light Fixtures
- Power and Cable Lines
- Roadways
Examples of Temporary Construction or Alterations:

- Construction Equipment
- Haul Routes
- Staging Areas
- Stock Piles
- Temporary Lights

Additional Submittals to the Nebraska Division of Aeronautics:

- Plan of the proposed construction or alteration showing the relation to the nearest runway
- The perpendicular distance from the centerline of the nearest runway to the proposed construction or alteration
- The projected distance along the centerline of the runway to the proposed construction or alteration
- The ground elevation at the site of the proposed construction or alteration
- The height of the proposed construction or alteration
- Accurate geodetic coordinates conforming to NAD 83
PIH Report Floodplain Wording

(6.1) Choose from the following:

**MAPPED COMMUNITIES**

Condition 1. Review of Floodplain Mapping shows that the project is located in a Mapped and Participating Community and crosses or overlaps upon Zone A Floodplains.

P-I-H Statement: (6.1) Review of floodplain mapping shows that the project overlaps upon one or more Zone A Floodplains. Certification(s) will be required from the Roadway Design Hydraulics Section and/or the Bridge Hydraulics Section confirming that the project conforms to floodplain regulations. Certifications will be forwarded to the Environmental Permits Unit for inclusion in a Permit Application.

Condition 2. Review of Floodplain Mapping shows that the project is located in a Mapped and Participating Community and crosses or overlaps upon Zone A Floodplains and Floodways. Check with Roadway Design Hydraulics Section to confirm whether Statement A or Statement B (below) is applicable.

**Use only the statement that applies:**

P-I-H Statement A (Typically use this statement when there is no channel or bridge work which changes the roadway profile, the conveyance capacity of the bridge or channel, and no roadway work which changes vertical or horizontal alignment or the existing roadway prism.):

(6.1) Review of floodplain mapping shows that the project overlaps upon one or more designated Floodways and Zone A Floodplains. Based on the current scope of work the project will be designed to assure that no increase in a Floodway’s Base Flood Elevation occurs. All certifications required from the Roadway Design Hydraulics Section and/or the Bridge Hydraulics Section confirming that the project meets floodplain regulations will be forwarded to the Environmental Permits Unit for inclusion in a Permit Application. Any change in project scope will be communicated to the Hydraulics Section(s).

or

P-I-H Statement B (Typically use this statement when Statement A condition does not apply.):

(6.1) Review of floodplain mapping shows that the project overlaps upon one or more designated Floodways and Zone A Floodplains. Roadway Design Hydraulics Section and/or the Bridge Hydraulics Section will do a hydraulic investigation to determine the effect of the project on the Floodway’s Base Flood Elevation. Depending on results of the analysis, the Hydraulics Section(s) will either certify that the current scope of the project conforms to floodplain regulations, work with Roadway Design to modify the project to conform to regulations, or pursue a floodplain map revision. It is unknown at this time whether or not a map revision will be required. All certifications required from the Hydraulics Section(s) confirming that the project meets floodplain regulations will be forwarded to the Environmental Permits Unit for inclusion in a Permit Application. Any change in project scope will be communicated to the Hydraulics Section(s).
Condition 3. **Review of Floodplain Mapping shows that the project is located in a Mapped and Participating Community and does not overlap upon any Floodplain or Floodway.**

P-I-H Statement: (6.1) Review of floodplain mapping shows that the project does not overlap upon a Floodplain or Floodway. No floodplain certification or permit is required for this project.

Condition 4. **Review of Floodplain Mapping shows that the project is located in a Mapped but Non-Participating Community and crosses or overlaps upon Zone A Floodplains.**

P-I-H Statement: (6.1) Review of floodplain mapping shows that the project overlaps upon one or more Zone A Floodplains in a non-participating community. Certification(s) will be required from the Roadway Design Hydraulics Section and/or the Bridge Hydraulics Section confirming that the project conforms to floodplain regulations. Certifications will be forwarded to the Environmental Permits Unit for record retention. A Permit is not required.

**NON-MAPPED COMMUNITIES**

Condition 5. **Review of Floodplain Mapping shows that the project is in a Non-Mapped and Non-Participating Community and crosses or overlaps upon Potential Zone A Floodplains.**

P-I-H Statement: (6.1) The project is located in a non-participating community with no floodplain mapping; State Minimum Standards apply. Review of topographic mapping shows that the project overlaps upon one or more Potential Zone A Floodplains. Certification(s) will be required from the Roadway Design Hydraulics Section and/or the Bridge Hydraulics Section confirming that the project conforms to floodplain regulations. Certifications will be forwarded to the Environmental Permits Unit for record retention. A Permit is not required.

Condition 6. **Review of Floodplain Mapping shows that the project is in a Non-Mapped and Non-Participating Community and does not overlap upon a Potential Zone A Floodplains.**

P-I-H Statement: (6.1) The project is located in a non-participating community with no floodplain mapping; State Minimum Standards apply. Review of topographic mapping shows that the project does not overlap upon a Potential Zone A Floodplain. This project does not require a floodplain certification or permit.

**BY EXPLICIT PERMISSION OF THE ROADWAY HYDRAULICS ENGINEER ONLY**

Condition 7. **Review of Project Scope and Plans shows that the project work Does Not Meet the Criteria for Development.**

P-I-H Statement: (6.1) Review of the project scope, project description and Plan-In-Hand Plans by the Roadway Design Hydraulics Engineer indicates that the project work has no potential to impact the Zone A Floodplains/Floodways it might cross, and does not meet the criteria for Development within a floodplain/floodway. Certification will not be required from the Roadway Design Hydraulics Section or the Bridge Hydraulics Section. A Permit is not required.

**(6.2) Use the following text (Designer should confirm that it applies):**

P-I-H Statement: (6.2) It is anticipated that this project will be certified to meet floodplain regulations. It is not anticipated to cause greater than one foot of rise in the Base Flood Elevation within a Zone A Floodplain, any rise in the Base Flood Elevation within a Designated Floodway, nor to impact a building.
DEFINITIONS

Floodplain Mapping
Flood Hazard Maps (FHM), Flood Hazard Boundary Maps (FHBM) or Flood Insurance Rate Maps (FIRM) accepted by the Federal Emergency Management Agency (FEMA) or created for review and acceptance by FEMA that show Special Flood Hazard Areas (SFHA0) subject to inundation by the 1% Annual Chance Flood (100-yr Flood).

Mapping is available at the FEMA Flood Map Service Center web site https://msc.fema.gov/portal or the Nebraska Department of Natural Resources Floodplain Interactive Map http://prodmaps.ne.gov/html5dnr/?viewer=dnr_floodplain

Potential Zone A Floodplain
A drainage way in a Non-Mapped Community, which has a watershed area of more than 640 acres (one square mile) upstream of the point of interest (usually the highway).

Mapped Community
A Community (County, City or Village) which has Floodplain Mapping (FHM, FHBM, FIRM, or work maps) (see definition above).

Non-Mapped Community
A Community (County, City or Village) which does not have Floodplain Mapping (see definition above). State Minimum Standards apply within these Communities.

Participating Community
A Community (County, City or Village) which is participating in the National Flood Insurance Program (NFIP). A Participating Community regulates development activities, via ordinances and permits, which occur in floodplains (mapped or potential) within its jurisdiction.

Non-Participating Community
A Community (County, City or Village) which does not participate in the National Flood Insurance Program (NFIP). A non-participating community does not regulate development activities that occur in floodplains (mapped or potential) within its jurisdiction.

State Minimum Standards
No construction, improvement or obstruction shall be allowed in the floodplain unless it is demonstrated that the effect of the construction will increase the water surface elevation of the base (100 year) flood for a:
- Zone A Floodplain - one foot or less (< 1.0 feet), and
- Floodway – no rise (0.00 feet).
Construction Meeting Agenda

This meeting is to be scheduled by the Roadway Design Unit Head or LPA Unit Head.

**Attendees:** District Engineer, Roadway Designer, Bridge Designer, Traffic, Construction, Hydraulics (Optional)

LPA Project Attendees: NDOT Project Coordinator, LPA RC/PL, LPA designees for Roadway, Bridge, Traffic, Construction, Hydraulics (Optional)

**Purpose:** We are here to provide answers about the project that are necessary to begin the NEPA process.

**When:** Schedule after preliminary plans have been distributed, prior to PIH visit.

**Deliverables:** Information to complete the PIH report. Summarize the conclusions reached at this meeting and include in PIH report:

- Will there be traffic disruptions requiring detours, temporary roads, or ramp closures that are greater than 30 working days, or greater than 135 working days?
- Urban (pop of 5,000 or greater) detour: Is there less than 5 miles of adverse (out-of-direction) travel?
  - Are there access provisions for local traffic?
- Rural detour: Is there less than 25 miles of adverse (out-of-direction) travel?
  - Are there access provisions for local traffic?
- Are there any measures being taken to avoid, minimize, or offset detours or other traffic impacts? Commitments to restrict detours?
- Does the project interfere with local special events or festivals, either on a temporary or permanent basis?
- Does the project have an adverse effect to through-traffic dependent businesses, either on a temporary or permanent basis?
- Will the project result in a substantial permanent traffic pattern change or disruption? (permanently closing a roadway or roadway intersection, increase through lane capacity, create new intersections, convert a roadway into a higher classification roadway)
- Will the project result in complete closure of access to residential properties greater than 5 working days, or greater than 10 working days?
- Will the project result in complete closure of business access during operational hours?
- Will the project restrict access to emergency service facilities or providers?
- Will the project permanently change the functional utility of a property? (truck turning movements, etc)
Discussion:

Roadway Design

- Amount of work scoped for the project – how many construction seasons are anticipated?
- Areas of potential impacts to access
- Preliminary ideas for phasing the construction activities on the project
  - Maintenance of traffic
  - Possible detours
  - Interchanges – slip ramps or closures?
  - Residential access impacts
    - Perm
    - Temp
- Business access impacts
  - Perm
  - Temp
- Emergency Services (Fire, Ambulance, Hospital, Health clinic etc.)
  - Access impacts
  - Effect of detour

Bridge

- Can the bridge can be built under traffic.
  - Recommendation for under traffic or closed.
  - Allowable lane widths.
  - Issues/challenges.
  - Estimated cost differences for each option if possible.
- Bridge Hydraulics – prelim design for temporary crossing
  - span lengths, flow – can temp access be constructed with a temporary bridge or is it possible to use culverts?
  - Will there be temporary crossing conflicts with adjacent property?
  - Are the grades to access the temporary crossing too steep for the crossing to be feasible?
- Will a work platform be required for construction?
- Will there be a grade change?

District / LPA

- Preference for detour route, if necessary. (If bridge is not phaseable, is it possible to build with temporary crossing or is a detour necessary/preferred)?
- Information on local celebrations/festivals
- Known residences/businesses that may experience access issues during project construction
- Are there other construction projects in the area that may affect traffic detours or access?

Traffic

- Lane width recommendations
- Temporary access or detour recommendations

Construction

- Constructability issues to address
- Special provisions to include in project PS&E file
- Will early clearing and grubbing be necessary?
### Abbreviations

<table>
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<tr>
<th>Abbreviation</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>ADA</td>
<td>Americans With Disabilities Act</td>
</tr>
<tr>
<td>ADE</td>
<td>Roadway Design Assistant Design Engineer</td>
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<tr>
<td>Bridge</td>
<td>Bridge Division</td>
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<tr>
<td>CA</td>
<td>Covenant Agreement</td>
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<tr>
<td>CADD</td>
<td>Computer Aided Drafting and Design</td>
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<tr>
<td>CICS</td>
<td>Customer Information Control System</td>
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<td>Communications</td>
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<td>DCE</td>
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<td>District Engineer</td>
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<td>Design Process Outline</td>
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<tr>
<td>EA</td>
<td>Environmental Assessment</td>
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<tr>
<td>EIS</td>
<td>Environmental Impact Statement</td>
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<td>FEMA</td>
<td>Federal Emergence Management Agency</td>
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<tr>
<td>FHWA</td>
<td>Federal Highway Administration</td>
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<tr>
<td>FONSI</td>
<td>Finding Of No Significant Impact</td>
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<td>FRA</td>
<td>Final Relinquishment Agreement</td>
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<td>Materials and Research Division</td>
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<td>NDOT</td>
<td>Nebraska Department of Transportation</td>
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<td>NRD</td>
<td>Natural Resource District</td>
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<td>Plan Development Unit in Roadway Design</td>
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<td>Plan-In-Hand</td>
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<td>P&amp;PD</td>
<td>Planning and Project Development Division</td>
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<td>PS&amp;E</td>
<td>Plans, Specifications, and Estimates Section in Construction</td>
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<td>PSS</td>
<td>Project Scheduling System</td>
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<td>Roadway Design Division</td>
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<td>Roadway Design Manual</td>
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<td>Record of Decision</td>
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<td>Right Of Way Division</td>
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<td>SWPPP</td>
<td>Stormwater Pollution Prevention Plan</td>
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<td>Traffic</td>
<td>Traffic Engineering Division</td>
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DPO Exhibit Index

A  Roadway Design/Environmental Coordination
B  Design Checklist
C  Public Meeting Checklist
D  Access Control Meeting
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F  Erosion Control Plan-In-Hand Checklist
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