

# Project Delivery Academy

## Environmental Clearance

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## Environmental Clearance

- ❑ Environmental clearance means the project impacts to the natural, built and human environments have been reviewed under all applicable environmental requirements and the project is “cleared” for construction
- ❑ ADOT Environmental Clearance
  - Required to advertise for construction
- ❑ Federal Environmental Approval
  - Required for Federal Highway Administration (FHWA) funding for Design, Right-of-Way and Construction



## ADOT Environmental Planning

### Environmental Planning (Transportation Division)

- ☐ Environmental Planners (“PM” of ENV Planning)
- ☐ Air Quality specialists
- ☐ Noise Technical Experts
- ☐ Archaeologists
- ☐ Biologists
- ☐ Hazardous Materials Specialists
- ☐ Water Resource specialists

## Environmental Requirements

### Environmental Requirements Hierarchy

- ❑ Law: United States Code (U.S.C.)
- ❑ Regulations: Code of Federal Regulations (CRF)
- ❑ FHWA Policy
- ❑ FHWA Formal Guidance
- ❑ ADOT Guidance

# Environmental Requirements

## Environmental Laws and Regulations

- ❑ The over-arching environmental law
  - **National Environmental Policy Act (NEPA)**
- ❑ “Environmental review” includes all *other applicable environmental laws*

**Title VI of Civil Rights Act of 1964**

**Executive Order 12898 (Environmental Justice)**

**23 USC Section 109 (Standards)**

**Clean Water Act (CWA)**

**Clean Air Act (CAA)**

**National Historic Preservation Act (NHPA)**

**Endangered Species Act (ESA)**

**US DOT Act – Section 4(f)**

**23 CFR 772 (Noise)**

**Comprehensive Environmental Response,  
Compensation and Liability Act (CERLA)**

**Safe Water Drinking Act (SWDA)**

**Public Hearing Requirements**

**Archaeological and Historic Preservation Act  
(AHPA)**



The Council of  
Environmental  
Quality (CEQ) NEPA  
regulations

FHWA NEPA  
Regulations

## **“CE and NEPA Assignment”**

- ❑ FHWA’s environmental responsibilities have been assigned to ADOT by agreement
  - An assignment of legal responsibility
  - ADOT acts as the “lead federal agency” and is the “decision-maker” in the federal environmental review process
- ❑ CE Assignment and NEPA Assignment
  - CE Assignment – “326 MOU”
  - NEPA Assignment – “327 MOU”
- ❑ FHWA retains program oversight (monitoring/audits)

## Determine the Type of NEPA Approval Needed

### Class of Action

- ☐ **Environmental Impact Statement (EIS)**
  - Impacts are significant (South Mountain)
- ☐ **Environmental Assessment (EA)**
  - Significance of impacts not clearly known (Expansion projects)
- ☐ **Categorical Exclusion (CE) – Focus of this training**
  - Impacts not significant (majority of projects)
  - Excluded from EA/EIS requirements (alternatives, public review)
  - CEs are “applied” and are not “Environmental Documents”



## Environmental Impact Statement



New South Mountain Freeway

Many formal requirements such as alternatives and their impacts need to be studied

Can take several years and significant funds to complete an EIS



## Environmental Assessment



US 93 Two Lanes to Four Lanes

Alternatives  
developed and  
screened and a Build  
and No Build  
evaluated

Can still take several  
years and significant  
funds to complete

## Categorical Exclusion

- ❑ CEs are listed (described) in federal regulations
  - Types of projects are listed CEs in the regulations. Match the project description to the description of the CE in the regulations
  - Technical equipment - (c)(1) CE with limited technical review very quickly
  - Projects in the right-of-way or below a total dollar amount
  - “Individual CEs” are not “listed” but can be used for projects that still meet the definition - adding a travel lane to an existing roadway

# Categorical Exclusions

- ❑ Match the general project description to the to the type of project and descriptions in the FHWA regulations to determine the applicable CE

Pathways



Preservation



Bridges



Capacity

Safety



Operational  
Right-of-Way

Total Cost



## Categorical Exclusions

- ☐ By regulation, CEs require the consideration “unusual circumstances.”
- ☐ Projects are also reviewed for other applicable environmental laws and regulations that may apply to the project

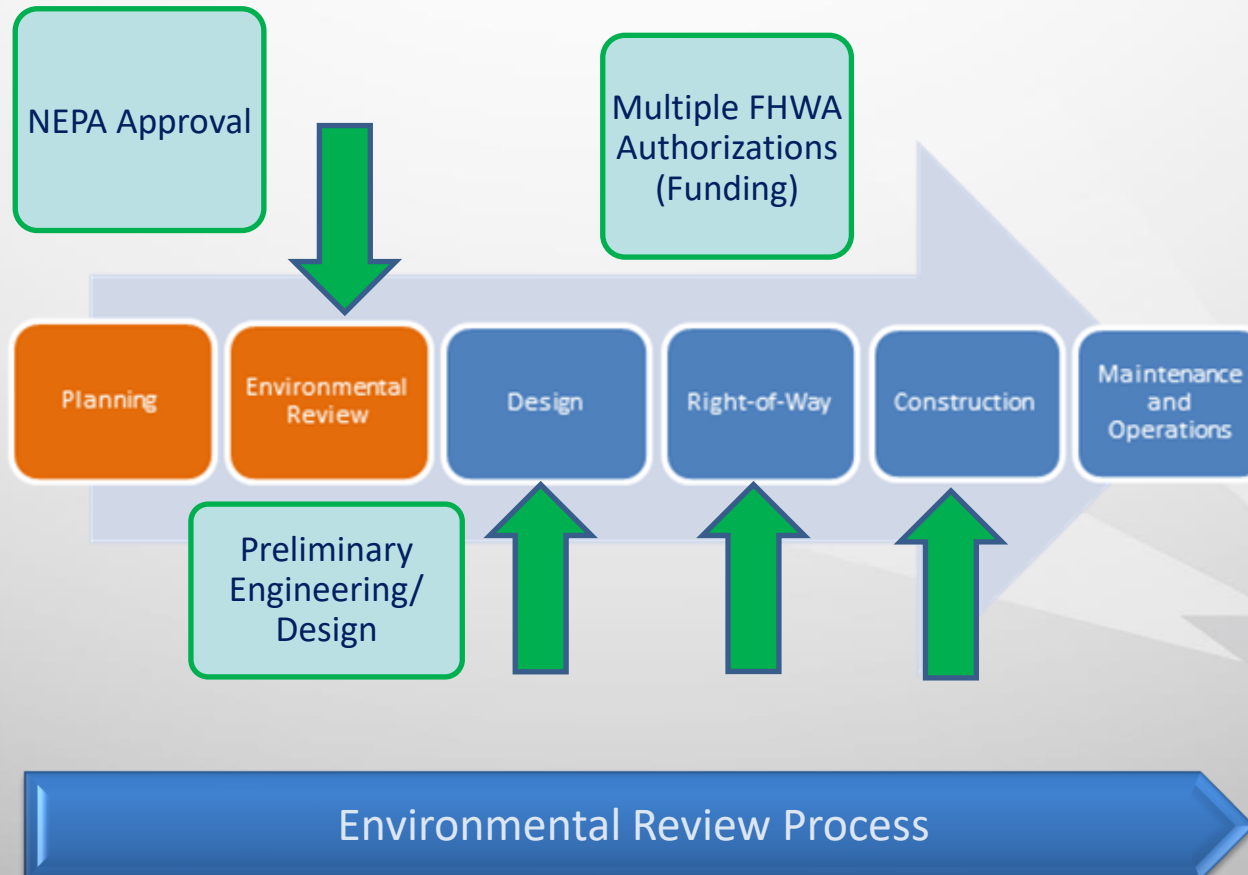


## The “Other” Environmental Laws

- ❑ The “other” environmental laws under the “NEPA umbrella” are not directly related to the class of action for NEPA.
  - ❑ Section 4(f) – Parks, Historic Properties, Wildlife Refuges
  - ❑ National Historic Preservation Act – Cultural Resources
  - ❑ Endangered Species Act – Biology
  - ❑ Clean Water Act – Army Corps Permits
  - ❑ Clean Air Act – Conformity Determinations
  - ❑ Noise Requirements – FHWA regulations
- ❑ Note that for nearly all projects, consideration for one of the “other” environmental laws under the “NEPA umbrella” is most likely to be the critical path in the preparation of a CE.

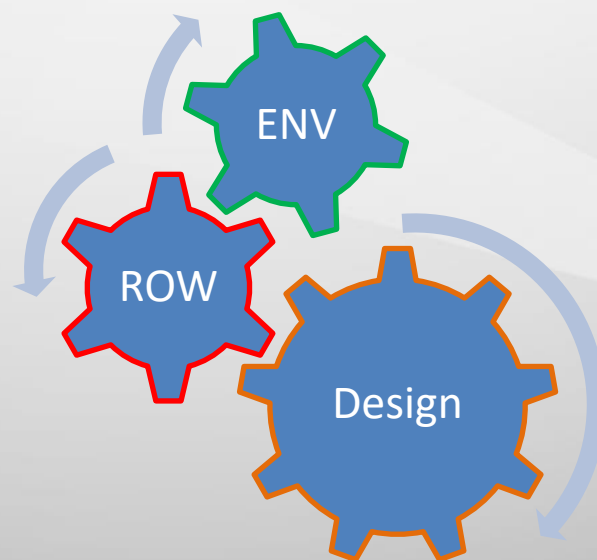


## Environmental in the Project Development Process





Environmental considerations need to happen throughout the PDP from the planning process through Design and ROW



Think holistically of how Environmental, Design and ROW all interrelate

## Field reviews



### ❖ Begin Environmental Clearance

- ❑ Refine the general type of work identified from planning and programming
- ❑ Identify issues that can influence the environmental clearance
- ❑ Finalize scope of work and confirm anticipated level of environmental review

## Begin Environmental Studies



- ❑ Site visit and/kick-off meeting
- ❑ Project “footprint” defined
  - ❑ Identify environmental constraints; areas that need to be avoided or will require mitigation if impacted
- ❑ Land owners and right-of-way
- ❑ Environmental surveys – biological, archaeological, historic properties, hazardous materials, noise

## Biological Resources



### ❖ Biological Review Process

- ❑ Review all available databases (AZGFD, US Fish & Wildlife Service, ADOT Data, other Federal or local agencies).
- ❑ Field review and biological surveys
- ❑ Biological Evaluations (BE) – [Short Form]
- ❑ Endangered Species Act (ESA) Determination(s)
  1. “No Effect”- Biology complete
  2. “May affect, not likely to adversely affect”- Informal consultation with USFWS
    - USFWS has **60 days** to review these requests and provide a “concurrence”
  3. “May affect, likely to adversely affect” - Formal consultation with USFWS
    - USFWS has **135 days** to review and issue a Biological Opinion
- ❑ Construction Considerations – Tree cutting, timing, avoidance





## Cultural Resources



### ❖ Assessing impacts to cultural resources (historic properties)

#### ❑ Section 106 - National Historic Preservation Act

- “Section 106” -impacts to historic properties
- Conduct ground surveys as needed
- Identify historic sites in the project area
- Identify project impacts to any historic sites
- Identify consultation parties on the project

#### ❑ Agreement Document – “Adverse Effect”

- Memorandum of Agreement (MOA), Programmatic Agreement (PA) or Attachment 6 of Statewide PA

#### ❑ Data recovery – Treatment Plan

- Implementation, fieldwork, post-fieldwork artifact processing and final report preparation

## Section 4(f) - Requirements

- ❖ “Section 4(f)” is preservation law created for the protection of parks, recreational areas, wildlife refuges and historic properties
  - ❑ ADOT must approve what is called a “use” of Section 4(f) property (“land of”)
  - ❑ There can be no “use” unless a determination is made
    - 1) There is no **feasible and prudent avoidance alternative** to the use of the Section 4(f) resource or;
    - 2) .....the use of the property....will have a “de minimis” impact on the Section 4(f) resource
  - ❑ There exceptions that may have to be documented approved (consultation/forms)
  - ❑ *De minimis* impact most likely type of Section 4(f) use on an ADOT project
  - ❑ Individual Section 4(f) Evaluations are time consuming and costly but less likely on an ADOT project

## Section 6(f) – Land Water Conservation Act

### ☐ Taking of park property purchased with LWCA funds

- National Park Service oversees the federal program
- AZ State Parks - database of 6(f) properties [LWCA funds]
- Review AZ State Parks database of 6(f) properties
- 6(f) property can be park land or just specific attributes purchased with 6(f) funds
- Land must be replaced before approval of NEPA (look at Early Acquisition)
- Coordination with the official with Jurisdiction over the park
- Document 'no 6(f)' if improvements are within a park but do not involve a land transfer (conversion)

# Air Quality



## ❖ The Clean Air Act and Conformity Determinations

- ☐ Clean Air Act – All projects must ‘conform to the National Ambient Air Quality Standards of the Clean Air Act
- ☐ “Nonattainment” and “Maintenance” Areas in Arizona are subject to the Clean Air Act Transportation Conformity Requirements (mainly urbanized)
- ☐ Planning requirements must be met
  - ☐ Inclusion in the Metropolitan Long-range Plans and Transportation Improvement Programs (TIPs)
- ☐ Prepare a traffic study for all horizon years (Build/No-build)
- ☐ Determine if it requires “Hot-spot” analysis (modeling & analytics) modeling through Interagency consultation
- ☐ Public review if hot-spot analysis is required
- ☐ ADOT approves for 326 projects/FHWA for 327



## Noise Requirements

### ❖ Noise Requirements

- 23 CFR 772 and ADOT Noise Abatement Requirements (2017).
- Projects that increase capacity by adding a travel or other lane(s) in excess of 2,500 ft , or substantially alter vertical or horizontal alignment would require:
  - ☐ Prepare a Traffic Study with the project and without the project for the Design Year
  - ☐ Field investigations of noise sensitive areas (homes, parks, schools, other)
  - ☐ Determination of “impacts” and Noise report prepared
  - ☐ Evaluated for identification of noise abatement measures (noise walls) that are feasible and reasonable (if not, justification why they are not)
  - ☐ Public involvement process (viewpoints of residents on noise walls)





## Hazardous Materials Review

- ❑ Location and scope of work - triggers
  - Preliminary Site Assessment (PISA)
    - New right-of-way must be cleared (ADOT Right-of-Way Manual)
    - Excavation in the right-of-way
    - Higher level site assessments may be recommended
  - Asbestos
    - Load bearing structures
    - Maricopa County Rule 310 requires survey within one year prior to the start of construction
  - Lead-Based Paint
    - Bridges – May require containment/removal



## Clean Water Act – Section 404

### ❖ Regional General Permit 96 (RGP 96) and Nationwide Permits

- ❑ Regional General Permit 96 (RGP 96) and Nationwide Permits
  - Non-notifying (No documentation to the corps)
    - Essentially no schedule impact
  - Pre-Construction Notification (Corps concurrence)
    - Up to 30-day wait time for the permit
- ❑ Individual Section 404 Permit – More costly and time-consuming
  - 60% plans needed
  - Project ESA and NHPA issues must be resolved
  - Must demonstrate Least Environmentally Damaging Practicable Alternative (LEDPA)
  - Mitigation may be required by the corps depending on impacts
  - Individual permit must be factored in the project schedule

## **“Other” Environmental Considerations That *May but usually do not Apply* on Project Approved with a CE**

- ❑ Visual Impacts
  - Typically for major projects on US Forest or BLM lands
  - Could be appearance of slopes or the look of structures
- ❑ Farmlands
  - Review farmlands (not slated for urbanization)
- ❑ Environmental Justice
  - Assess for “disproportionate impacts” if there are minority and low income populations present *and* impacted
- ❑ Floodplains
  - “Significant encroachment” (unlikely for a CE project)

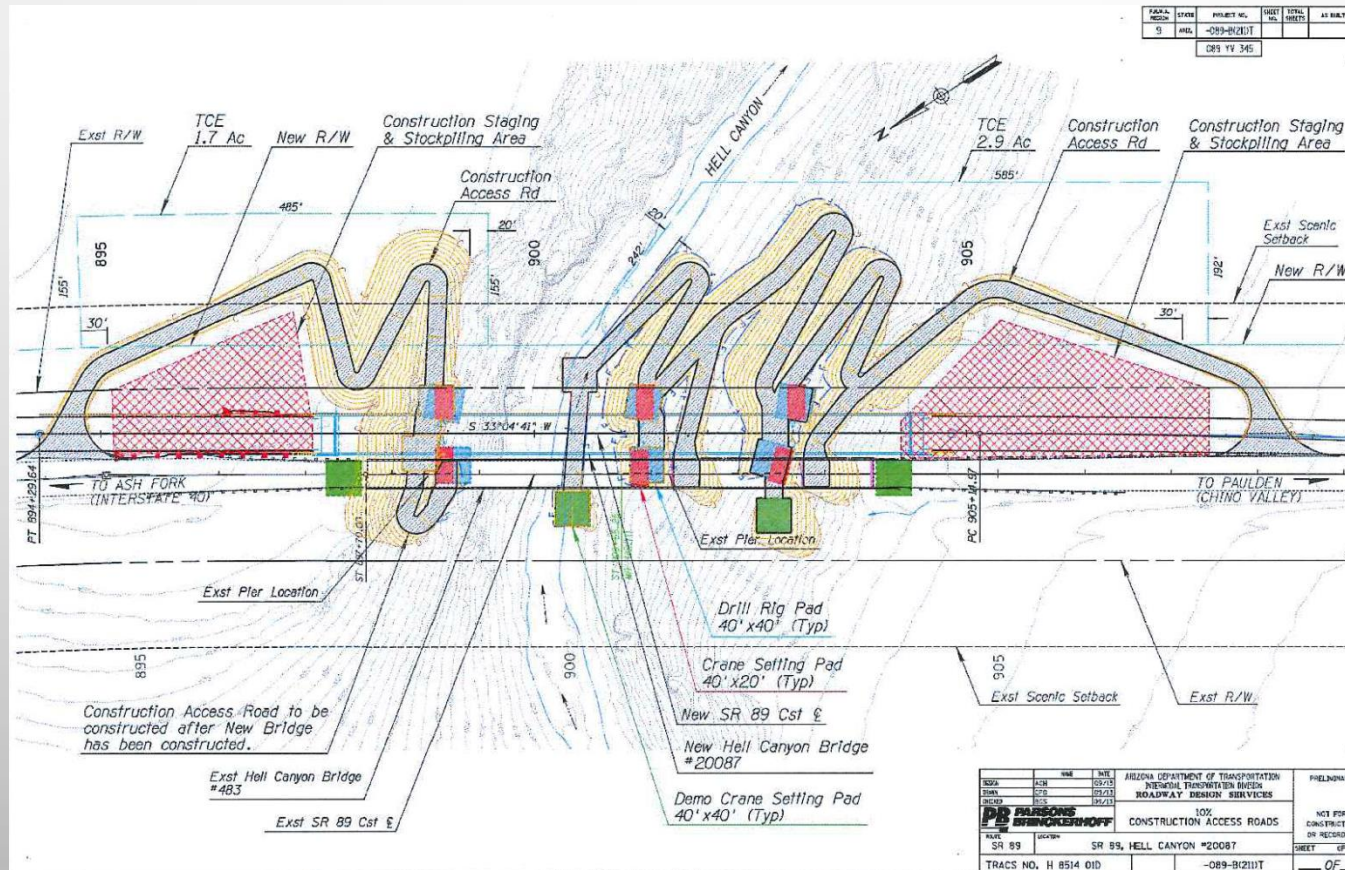
## Public Involvement



- ❑ ADOT's implementation of public involvement is guided by the ADOT Public Involvement Plan
- ❑ Environmental Planning and ADOT Communications work together to implement public involvement at ADOT
- ❑ For projects, the level of public involvement is scaled to the scope and impacts of the project
- ❑ CEs do not have a public review requirement – CE available upon request
- ❑ Public involvement is usually included on most projects to some degree, project website
- ❑ Public Meetings – larger expansion projects (CEs)



# Constructability and footprint



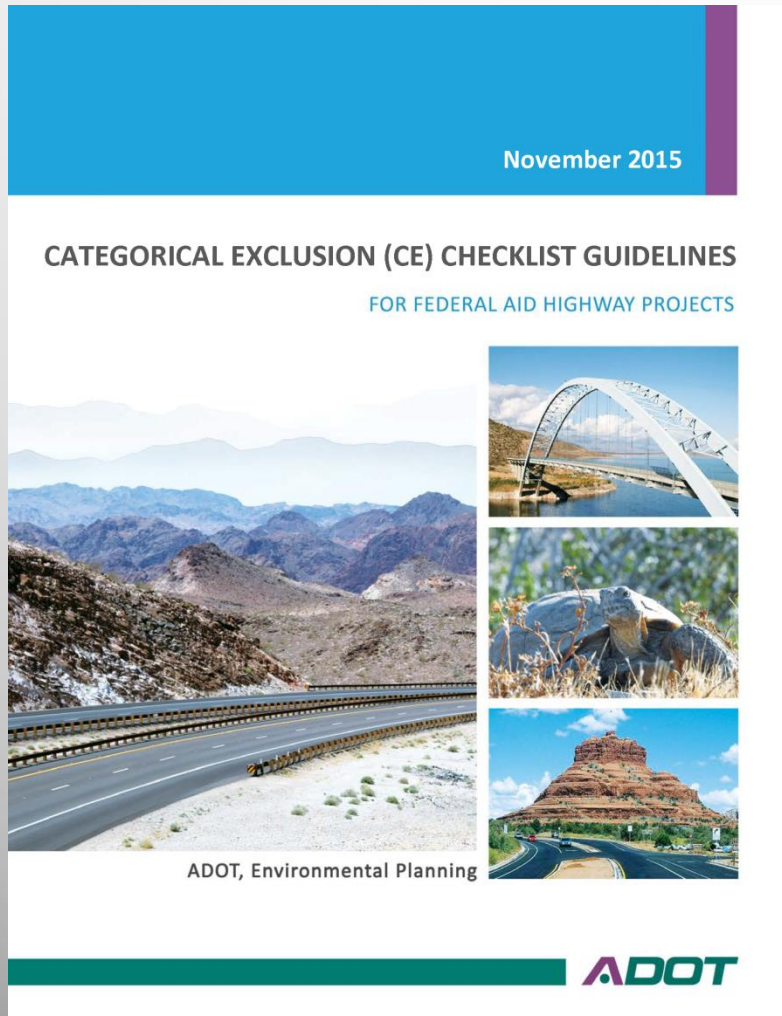
Constructability,  
site access,  
environmental  
footprint, and  
permitting

What is the access  
plan?

Temporary  
easements and  
permitting based  
on the plan.



# Categorical Exclusions



## ❖ CE Checklist

- ☐ The “CE” is environmental review documentation and approval for NEPA compliance
- ☐ The ADOT CE Checklist Manual provides step-by-step instruction on completing the CE checklist
- ☐ The CE Checklist itself is a streamlined documentation format
  - ☐ How long it takes to complete is dependent on how long it takes to develop the project and the entire environmental review
- ☐ It acknowledges compliance with all environmental review requirements for a project

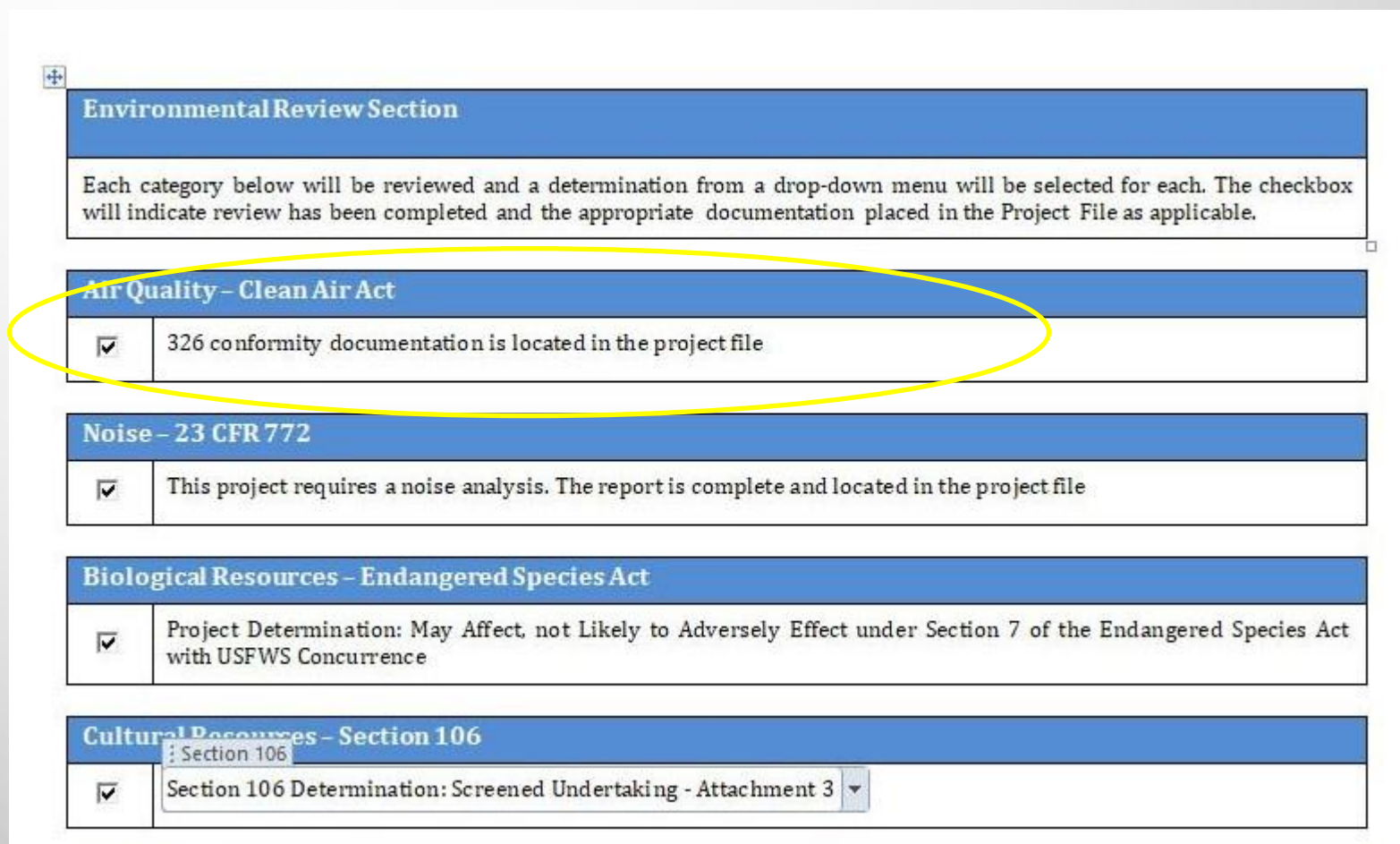
# Categorical Exclusions

- ☐ Planning Process defines the project (TIP/Scoping)
- ☐ ADOT Project Manager - provide the Project Information (Data, location, limits and description)
- ☐ ADOT ENV Planner completes the CE Checklist based on all Project Information and technical reviews completed
- ☐ CE type selection

Project Information:	
<b>Project Name:</b> <b>ADOT Project Number:</b> <b>Federal-Aid Number:</b> <b>Estimated Project Construction Cost:</b> <b>Planning Requirements:</b> <input type="checkbox"/> STIP/Line Item <input type="checkbox"/> ADOT Sub-program <b>CE Start Date:</b> <a href="#">Click here to enter a date.</a>	<b>Construction Project Administration</b> ADOT <input type="checkbox"/> CA Agency <input type="checkbox"/> <b>Categorical Exclusion Approval for FMIS</b> 2A - (c) Listed <input type="checkbox"/> 2B - (d) Listed <input type="checkbox"/> 2C - (d) Unlisted <input type="checkbox"/>
Re-evaluation:	
<input type="checkbox"/>	This project has been re-evaluated pursuant to 23 CFR 771.129 due to a change in the project scope, location, or termini or because of the need to evaluate new impacts not previously considered, or because five years have passed since the date of the CE Approval. The information on this form reflects all updates to the project information.
Location and Limits:	
Purpose and Description (scope of work):	
Type of CE - Choose <u>one</u> from (c) <u>or</u> (d) <u>or</u> Appendix A drop-down lists:	
(c) - list:	(d) - list:
<input type="checkbox"/> (c)(1) Non-Construction If the project qualifies for a (c)(1) CE then no Technical Sections review is required and the CE is complete. Proceed to NEPA Compliance Certification and Categorical Exclusion Approval.	

## Categorical Exclusions

- ❑ A series of drop-down menu selections are used to document relevant environmental concerns
- ❑ The responsible technical areas of Environmental Planning verify the appropriate selections on the checklist are made
- ❑ An additional space exists for “Other Considerations” not included in a drop-down menu



**Environmental Review Section**

Each category below will be reviewed and a determination from a drop-down menu will be selected for each. The checkbox will indicate review has been completed and the appropriate documentation placed in the Project File as applicable.

Air Quality – Clean Air Act	
<input checked="" type="checkbox"/>	326 conformity documentation is located in the project file

Noise – 23 CFR 772	
<input checked="" type="checkbox"/>	This project requires a noise analysis. The report is complete and located in the project file

Biological Resources – Endangered Species Act	
<input checked="" type="checkbox"/>	Project Determination: May Affect, not Likely to Adversely Effect under Section 7 of the Endangered Species Act with USFWS Concurrence

Cultural Resources – Section 106	
<input checked="" type="checkbox"/>	Section 106 Determination: Screened Undertaking - Attachment 3



## Categorical Exclusions

- ☐ The authority under which MOU the project is approved is noted
- ☐ Whether or not there are environmental commitments bound to the project is acknowledged
- ☐ ADOT Environmental Planner signs and ADOT Admin or Senior Planning Manager approves

Certification and Determination by ADOT	
<input type="checkbox"/>	The State has determined that this project has no significant impact(s) on the environment and that there are no unusual circumstances as described in 23 CFR 771.117(b). As such, the project is categorically excluded from the requirements to prepare an environmental assessment or environmental impact statement under NEPA. The action complies with NEPA requirements relating to connected actions and segmentation [23 CFR 771.111(f)]. The State has been assigned, and hereby certifies that it has carried out, the responsibility to make this determination pursuant to 23 U.S.C. 326 and a Memorandum of Understanding dated January 4, 2021, executed between FHWA and the State.
<input checked="" type="checkbox"/>	The State has determined that this project has no significant impact(s) on the environment and that there are no unusual circumstances as described in 23 CFR 771.117(b). As such, the project is categorically excluded from the requirements to prepare an environmental assessment or environmental impact statement under NEPA. The action complies with NEPA requirements relating to connected actions and segmentation [23 CFR 771.111(f)]. The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by ADOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated April 16, 2019 and executed by FHWA and ADOT.

Environmental Commitments	
<input checked="" type="checkbox"/>	Environmental commitments are included with this project and will be incorporated into the project plans, specifications and estimates as required.

Categorical Exclusion Approval	
<div>Prepared By:</div> <div>Click here to enter text.</div> <div>Environmental Planner</div>	<div>Date:</div> <div>Approved By:</div> <div>Administrator, Environmental Planning</div> <div>Date:</div>



## Environmental Commitments



### ❖ Environmental Commitments

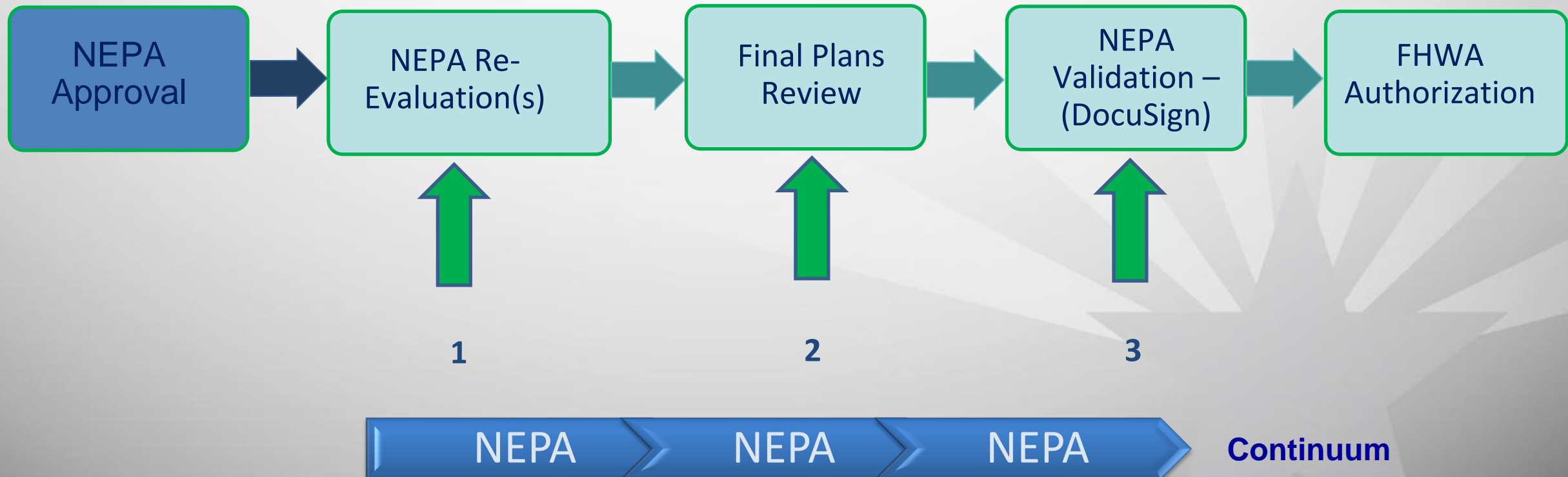
- ❑ Developed over the course of the project
  - ❑ Avoidance, minimization and compensation
  - ❑ Reviewed and agreed-upon by the Project Team
- ❑ Part of the CE/NEPA by incorporation
- ❑ Contractor commitments included in the contract
- ❑ The Environmental Issues Permits and Commitments plan sheet (EPIC) - *New*
  - ❑ Helps implement environmental commitments in construction
  - ❑ Resident Engineer approves upon completion

## Quality Assurance and Quality Control



- ❑ ADOT Quality Assurance and Quality Control (QAQC) Plan
  - ❑ Outlines review procedures
  - ❑ Quality Control review of CE
  - ❑ Record of reviews required for the project file
  - ❑ Individual CE has an additional Senior Manager sign-off
- ❑ Approval of a Project CE
  - ❑ CE Checklist signed by Environmental Planner and sent by DocuSign for manager approval
  - ❑ Approval of CE by Environmental Planning Administrator or delegate (Senior Manager)
  - ❑ Approvals are usually done within one day

## Final Steps on the way to Federal Authorization



## NEPA Re-Evaluation(s)

1

## Re-Evaluations of NEPA

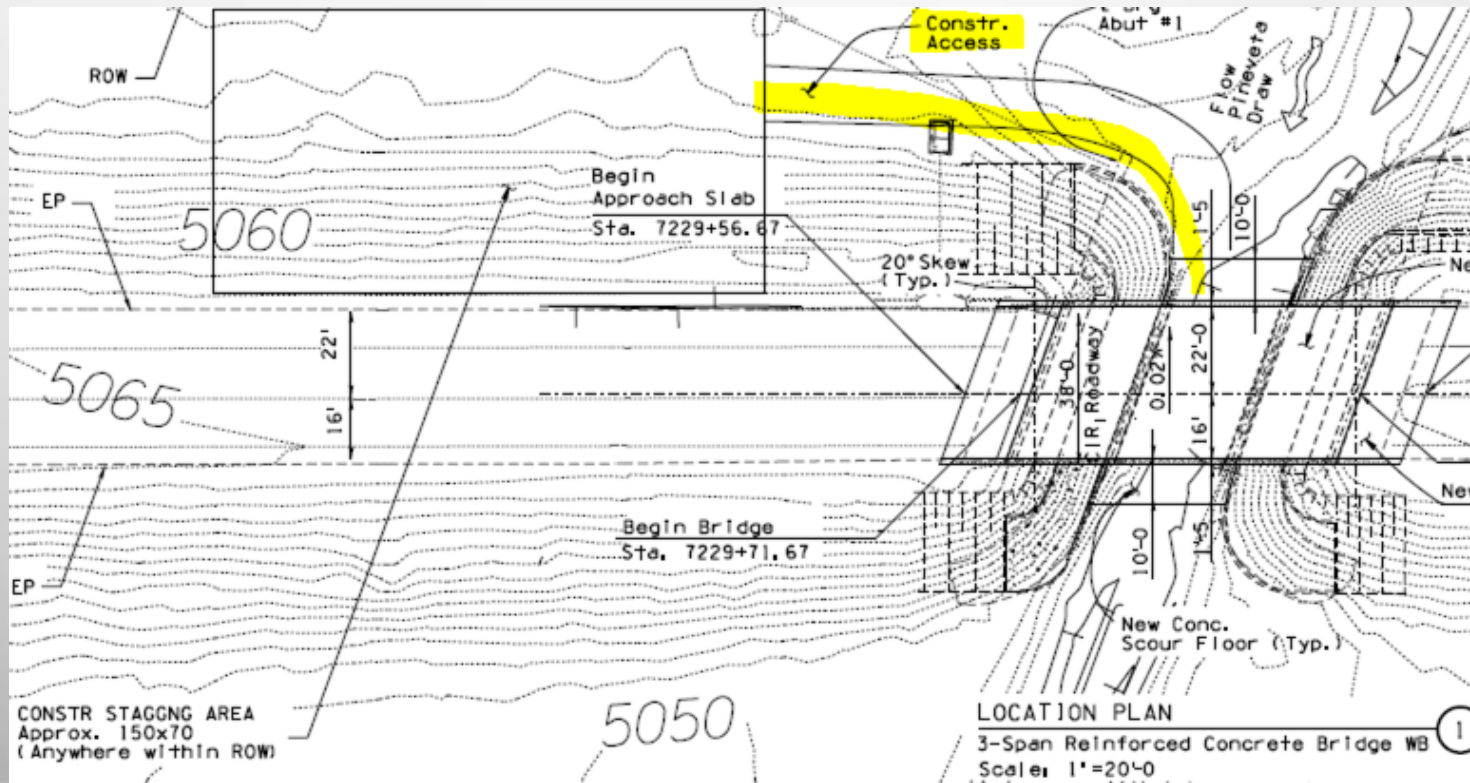
- ☐ NEPA re-evaluation may come any time after NEPA Approval
- ☐ **Formal** - (More complex project, scope change, time elapsed)
  - ☐ Updated CE or Environmental Document (NEPA approved)
    - ☐ EA Re-Evaluation (template) or;
    - ☐ CE Re-Evaluation (Re-Evaluation box on CE Checklist)
- ☐ **Informal** – (no substantial changes, circumstances or analysis)
  - ☐ For review of changes after NEPA
    - ☐ Note to File, Email, Phone Memo, etc.



# Final Plans Review

- ENV is responsible for checking the final plans prior to ADOT validating NEPA
- Confirmation of no change in project scope, right-of-way and/or project limits
- Confirm environmental commitments are complete and provided to Contracts and Specifications

## 2



## NEPA Validation at the Request for Federal Authorization

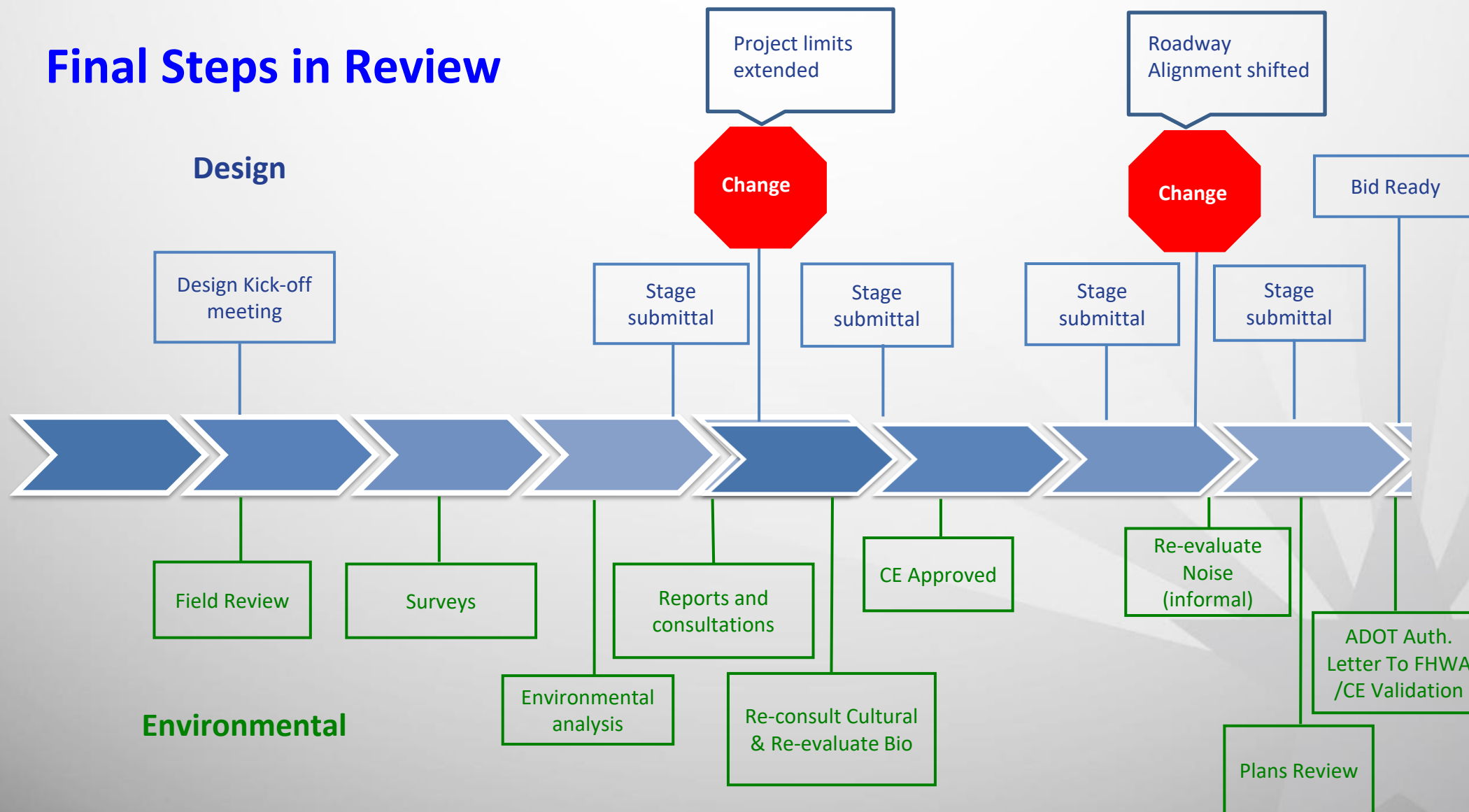
NEPA  
Validation –  
(DocuSign)

3

### Federal-aid Authorization Request

- ☐ ADOT Project Manager submits authorization request to FHWA
  - ☐ ADOT ENV Planner signs the letter and confirms the project meets ADOT's "Assignment" MOU requirements including:
    - ☐ NEPA approval date
    - ☐ Date of a formal re-evaluation (if applicable)
    - ☐ Project incorporates all environmental commitments per 23 CFR 771.109(d)

# Final Steps in Review



## Changes During Construction



- ❑ Changes During Construction
  - ❑ New scope of work
  - ❑ Work in areas not previously cleared
- ❑ Resident Engineer (RE)
  - ❑ Identifies changes through change order process
  - ❑ Sends requests to Environmental Planning for review as needed
  - ❑ Example; change in noise barrier design
  - ❑ Typically informal with a note-to-file review



# Thank You

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