PROJECT DELIVERY ACADEMY

ENVIRONMENTAL CLEARANCE

Paul O'Brien, P.E. - Environmental Planning Administrator
Katie Rodriguez - Environmental Planning Project Delivery Manager

October 2022

WHAT IS AN ENVIRONMENTAL CLEARANCE?

- In short it means the project has been reviewed under all applicable environmental requirements and is “cleared” for construction

<u>Environment</u>

- Natural – Air, land, water, trees, wildlife, habit, etc.
- Built – Buildings, bridges, roadways, etc.
- Human – Social, economic

WHY WE NEED AN ENVIRONMENTAL CLEARANCE

Federal-aid Highway Program Requirements

- Federal Highway Administration (FHWA)
  - Federal Funding
  - Right-of-Way of Federal Lands

WHO IS IN ENVIRONMENTAL PLANNING?

Environmental Planning (Transportation Division)

- Environmental Planners
- Air Quality specialists
- Noise Technical Experts
- Archaeologists
- Biologists
- Hazardous Materials Specialists
- Water Resources

WHAT IS AN ENVIRONMENTAL CLEARANCE?

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

Federal and State Environmental Laws and Regulations

- The over-arching environmental law
  - **National Environmental Policy Act (NEPA)**
- NEPA requires the federal government (FHWA) to consider the environment in major federal "actions"
- "Environmental review" includes all *other applicable environmental laws*

NEPA – Environmental Law

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)

NEPA – Framework for all other relevant laws

US DOT Act – Section 4(f)

23 CFR 772 (Noise)

Comprehensive Environmental Response, Compensation and Liability Act (CERLA)

Safe Water Drinking Act (SWDA)

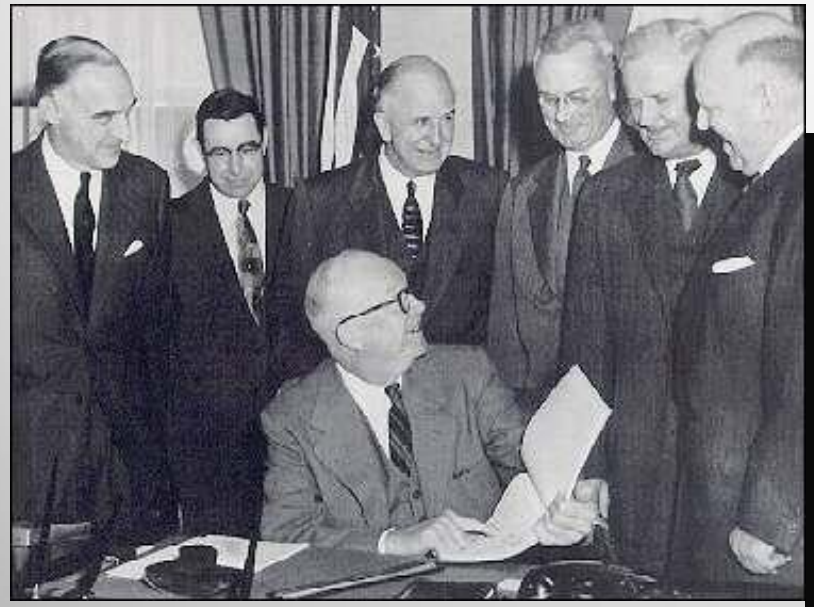
Public Hearing Requirements

Archaeological and Historic Preservation Act (AHPA)

ASSIGNMENT OF FHWA ENVIRONMENTAL RESPONSIBILITY

- Transfer of FHWA's environmental responsibilities under environmental laws to ADOT
  - An assignment of legal responsibility
  - ADOT is "decision maker" in federal environmental review process

WHY WE HAVE SOME OF THESE LAWS



TYPES OF NEPA APPROVAL

Class of Action

- **Environmental Impact Statement (EIS)**
  - Impacts are significant (South Mountain)
- **Environmental Assessment (EA)**
  - Significance of impacts not clearly known (big projects)
- **Categorical Exclusion (CE)**
  - Impacts not significant (preservation projects – majority)

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 Exclusions

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

Pathways

Preservation

Bridges

Capacity

Safety

Categorical Exclusions

- By regulation, CEs require the consideration "unusual circumstances."
- 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.

The “Other” environmental laws

For most projects the other environmental laws under the “NEPA umbrella” are most likely to be the critical path in the preparation of CEs:

- Section 4(f) – Parks, Historic Properties, Wildlife Refuges
- National Historic Preservation Act
- Clean Water Act – Army Corps Individual Permit
- Endangered Species Act – Biology
- Clean Air Act – conformity determinations

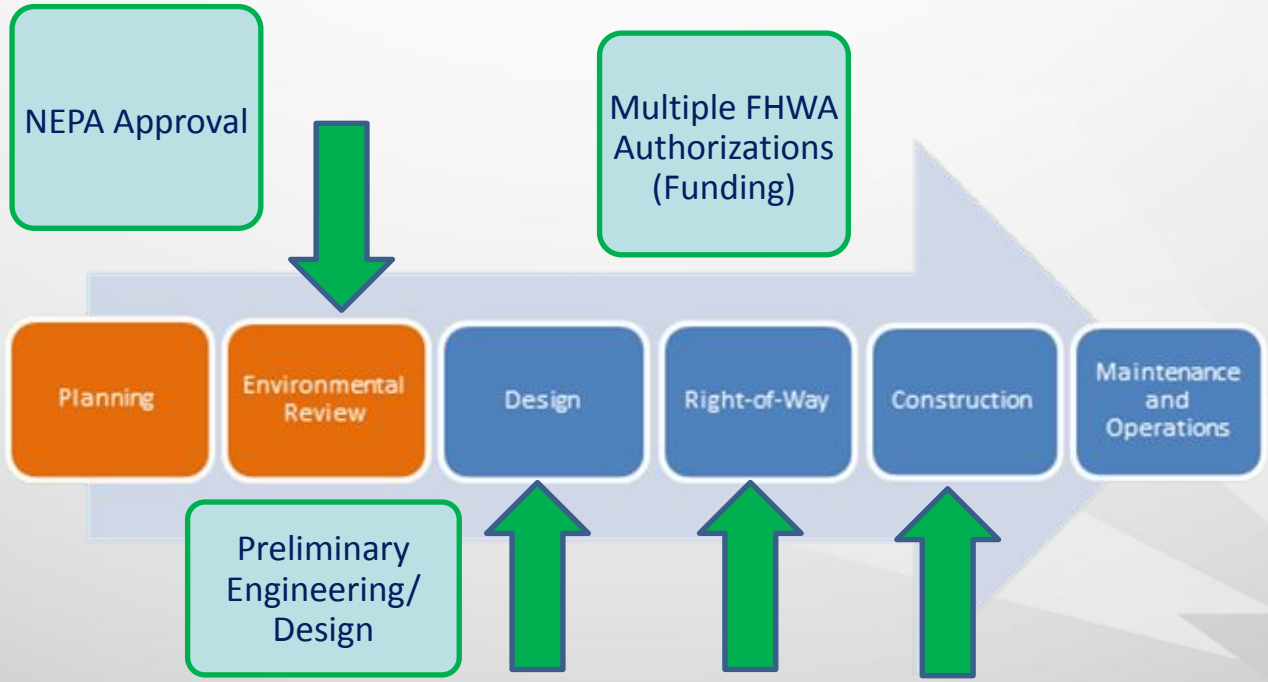
Environmental Clearance

What is environmentaly “cleared”?

- The project as described; “paving” not a bridge
- Milepost limits; “from here to there”
- “Project footprint” as described including new right-of-way (permanent or temporary)
- Scope of work items described within those limits and as outlined in the design plans
- Constraints within the limits including avoidance areas or areas requiring a monitor during construction
- The sum total of all work described above in compliance with each individual law/regulation as applicable

Integrated Project Development Process

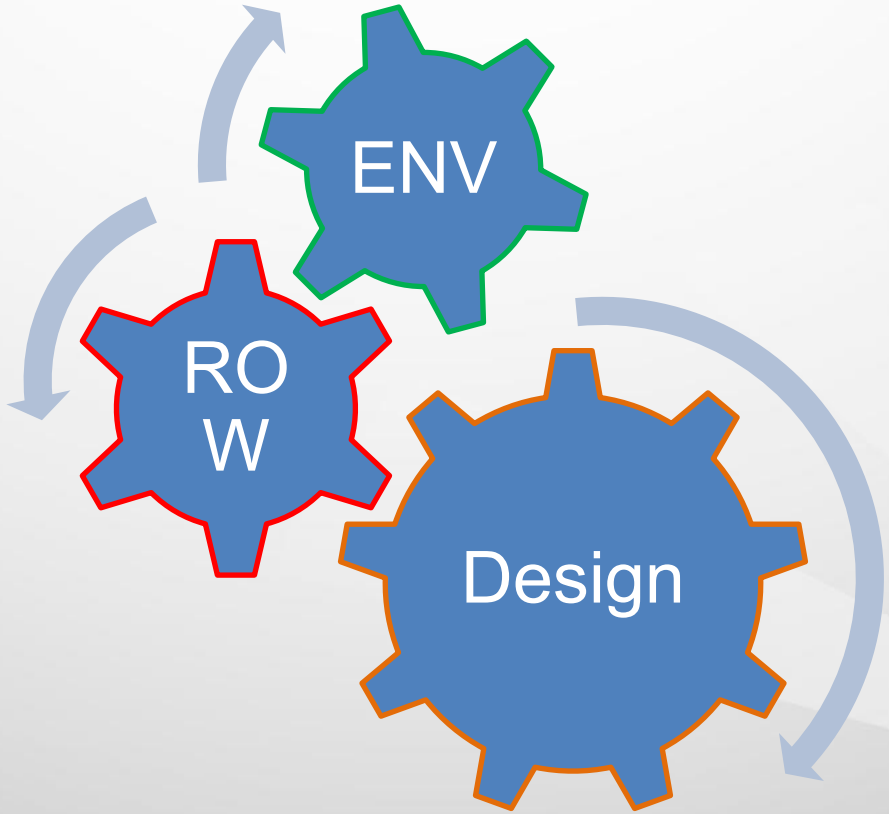
Environmental in the Project Development Process



Environmental Review Process

Continuum

Engineering and Environmental is an integrated process



Think holistically of how project development components all interrelate

Environmental considerations need to happen throughout the project development process

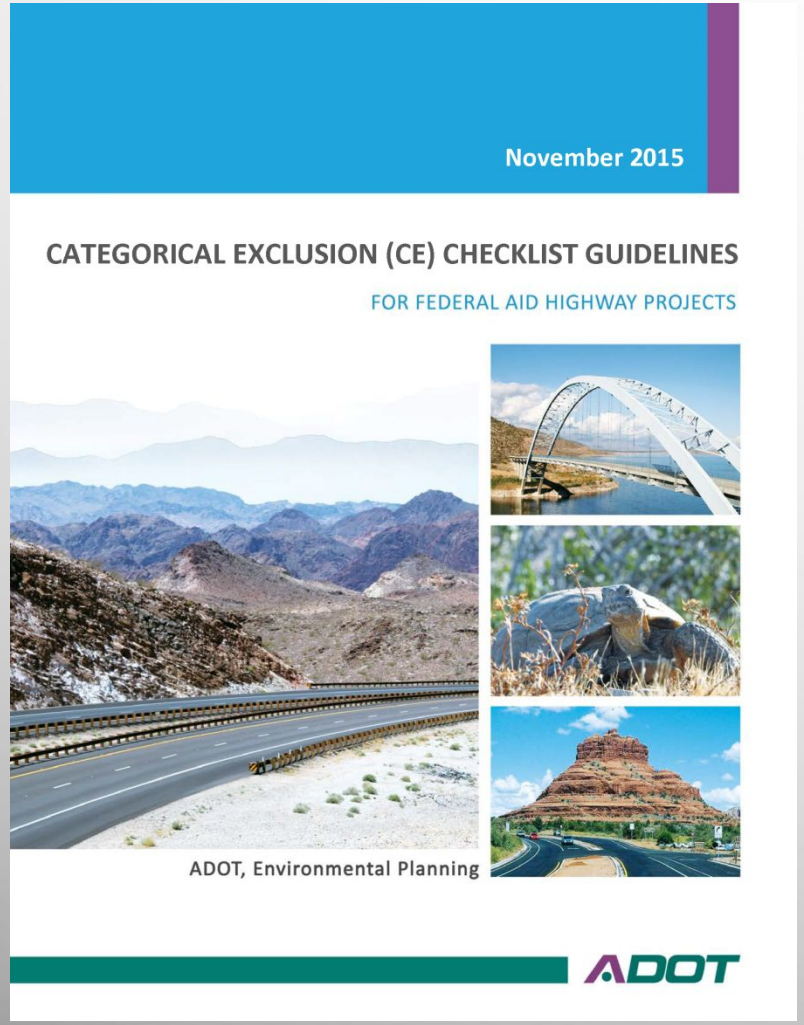
COORDINATION

- Communicate changes quickly
- 100% footprint for ENV & ROW at 60% Design
- Identify ROW and (TCEs) early in Design
- Identify scope such as geotechnical work early
- Get funding in place quickly for additional work added to the project

SCHEDULE

- Complexity of project
  - CE – 3 to 12 months
  - EA – 1 to 3 years
  - EIS – 3 to 5+ years [new 2-year timeline]
- Regulation review timelines and coordination with of other agencies
- Re-evaluations: Changes in project scope or limits requiring technical updates and consultations

Categorical Exclusions

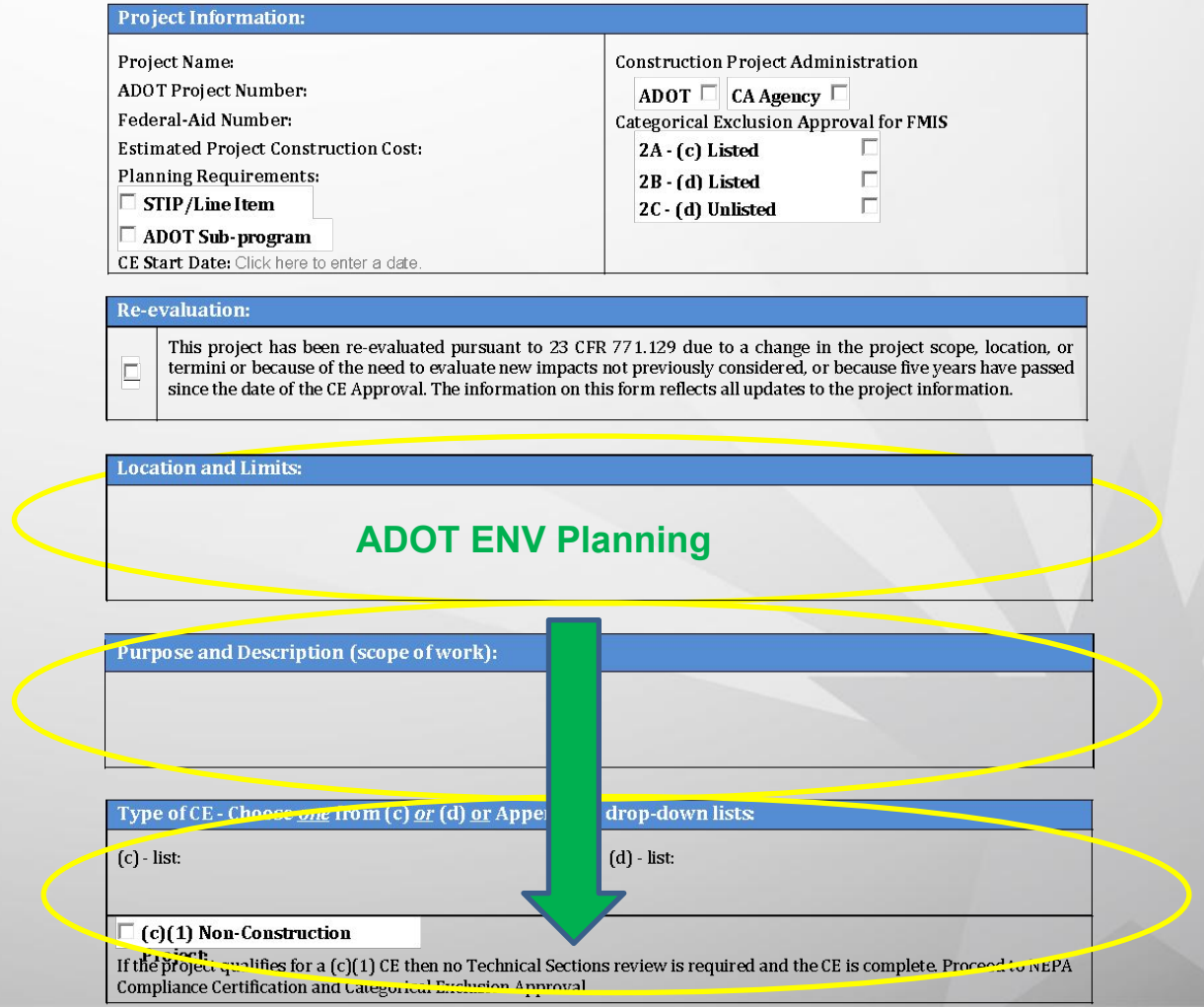


❖CE Checklist

- ❑ The “CE” is environmental review documentation and federal 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
  - ❑ Utilizes drop-down menus (little writing)
- ❑ It is “NEPA approval” but acknowledges compliance with all environmental review requirements for a project

Categorical Exclusions

- CE based on the project (from TIP/engineering scoping)
- 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
- A series of drop-down menu selections are used to document relevant environmental concerns

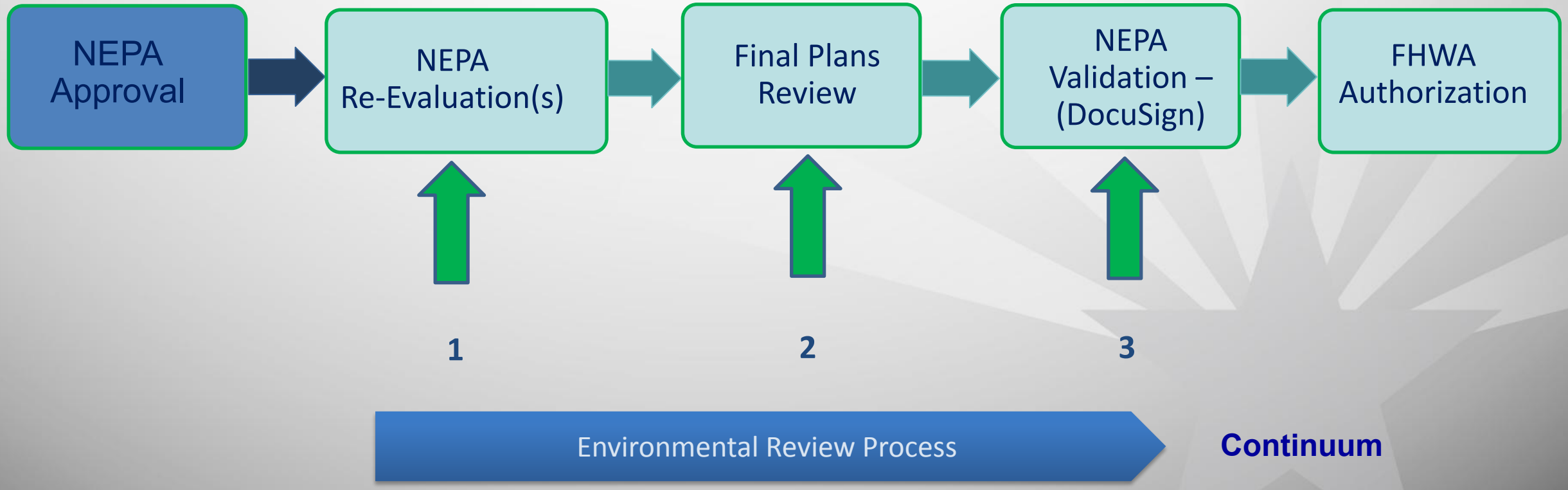


Categorical Exclusions

- "How long does it take to prepare a CE?" or really "How long does it take to develop a project?"

  - The CE is a summary of the totality of surveys, studies, consultations, analysis and "other law" compliance *as applicable* ("it depends")
  - Some projects such as (equipment) can be cleared with limited technical review
  - "Individually documented and approved" CEs for projects such as adding a travel lane to a roadway can take 9 to 12 months
    - Be mindful of the timing of technical reviews for example:
      - Biological Opinion – US Fish & Wildlife 135 days by regulation
      - Conformity determination - the "planning requirements" are not up to date the CE approval could be delayed for months

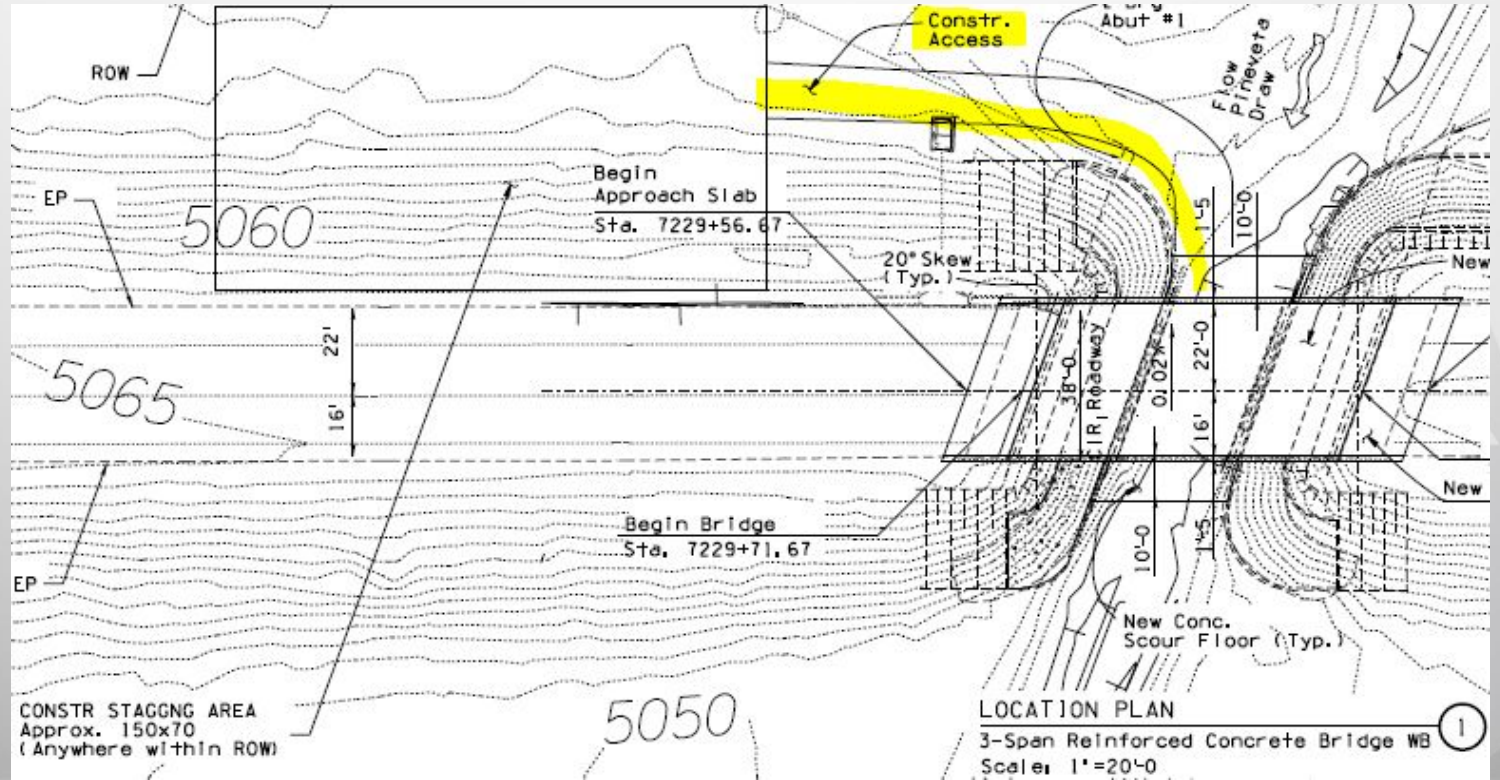
Final Steps on the way to Federal Authorization



Final Plans Review

Final Plans Review

- 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 included in Contract



Environmental & Design

FIELD REVIEWS

General type of work identified from planning and programming

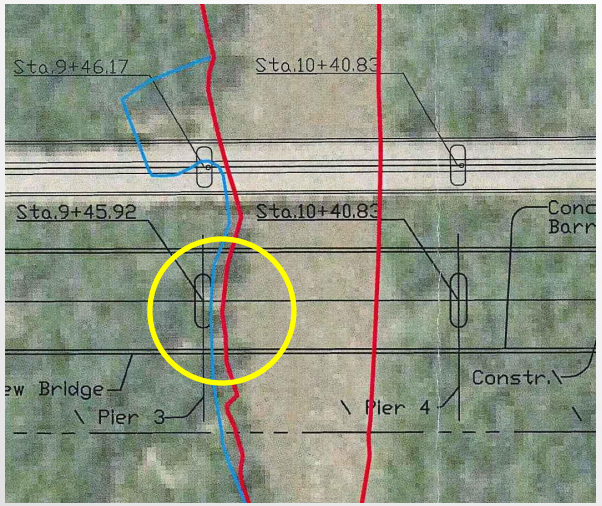
Identify issues that can influence the environmental clearance

Finalize scope of work and confirm anticipated level of environmental review

ENVIRONMENTAL CONSTRAINTS

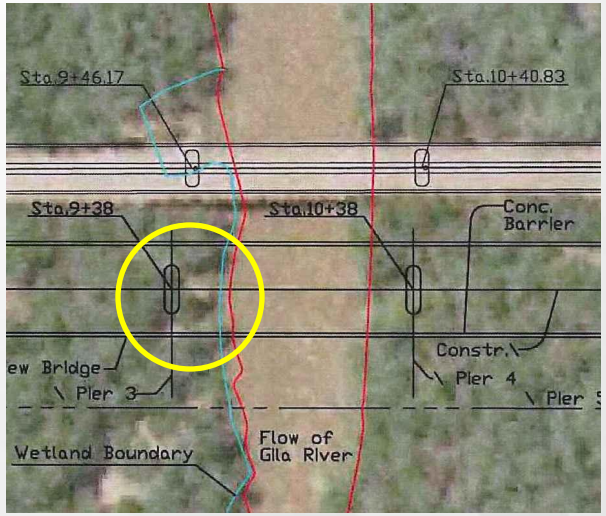
- ***Avoid, Minimize, Mitigate*** – Integral with the project development process
  - Avoid - Environmental Resources (Design)
    - Compromise (not at the expense of safety)
  - Minimize - Impacts (Design)
  - Mitigate - Compensation for unavoidable impacts

DESIGN AND PERMITTING



Preliminary design impacted a wetland (bridge piers)

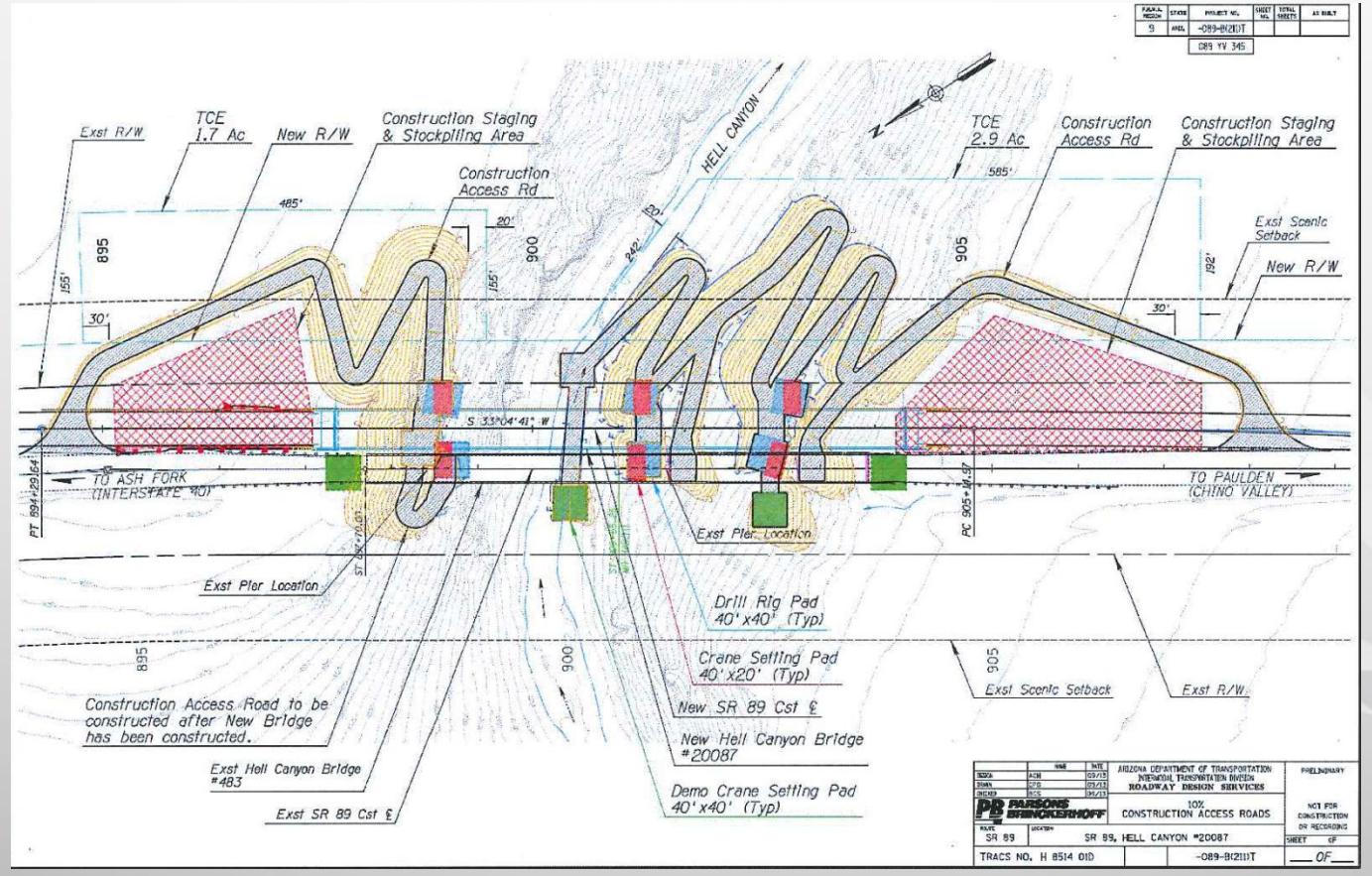
Section 404 Individual Permit



Bridge piers relocated

Impact to wetlands avoided – permitting simplified

CONSTRUCTABILITY AND FOOTPRINT



Constructability, site access, environmental footprint, and permitting

What is the access plan?

Temporary easements and permitting based on the plan.

AVOIDANCE AREAS

Environmental Commitments

Identified during project development and implemented in construction

Avoidance areas may need to be delineated

May need a monitor during construction

HAZARDOUS MATERIALS MITIGATION

Mitigation during construction – lead paint containment

ARCHAEOLOGICAL INVESTIGATIONS

Known data recovery (archaeology) needs to be integrated with construction phasing

Data recovery prior to construction

Field work prior to construction but analysis and reporting take longer to complete

ENVIRONMENTAL COMMITMENTS

"Avoid, Minimize and Mitigate" can be on a large scale

I-10 Deck Park Tunnel :

- ✔ Placed in tunnel
- ✔ Avoided historic structures
- ✔ Park built on top
- ✔ Sound Walls
- ✔ Landscaping/aesthetics

CHANGES DURING CONSTRUCTION

Changes in construction may require Re-Evaluation

Temporary Access Road (green road) for rock cutting not included in the original clearance

Additional environmental work needs to be cleared by ADOT

Questions?